

Ephemerides N. 756 to 18

Ολύμπια Δώματα *pp. 2465*

OR, AN

ALMANACK

For the YEAR of

Our LORD GOD, 1782;

Being the Second after

BISSEXTILE, or LEAP-YEAR,

And from the World's Creation, 5786.

Wherein is Contained the Lunations, Conjunctions, Aspects, and Effects of the Planets; and Increase, Decrease, and Length of the Days and Nights; with the Rising, Southing, and Setting of the Planets and fixed Stars throughout the Year; whereby may be known the exact Hour of the Night at all Times, when either the Moon or Stars are seen.

Calculated according to Art, and referred to the Horizon of the ancient and renowned Borough Town of Stamford (formerly a famous University) whose Latitude is 52 Deg. 20 Min. fitting all the Counties of ENGLAND, and, without sensible Error, the whole Kingdom.



Non est à Ferris mollis ad Astra Via.

By TYCHO WING, *Philomath.*

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Common NOTES and Moveable FEASTS.

Dominical Letter	- - F	Septuagesima Sund.	Jan. 27
Golden Number	- - 16	Shrove Sunday	- Feb. 10
Epact	- - 15	Easter Day	- Mar. 31
Cycle of the Sun	- - 27	Whit-Sunday	- May 19
Roman Indiction	- - 15	Trinity Sunday	- May 26
Number of Direction	- 10	Advent Sunday	- Dec. 1

A CATALOGUE of the Most Reverend, Right Reverend, and Reverend, the Archbishops, Bishops, and Deans, exercising Ecclesiastical Jurisdiction in England, 1782.

<i>Archbishops.</i>	<i>Deans Names.</i>	<i>Sees Names.</i>
H. Dr. Fr. Cornwallis	H. J. Cornwallis, LL.D.	Canterbury
Dr. Wm. Markham	Dr. John Fountayne	York
<i>Bishops.</i>		
Dr. Robert Lowth	Dr. Thomas Newton	London
Hon. Dr. John Egerton	Hon. Wm. Digby	Durham
Dr. North	Dr. Newton Ogle	Winchester
Lord James Beauclerk	Dr. Nat. Wetherell	Hereford
Dr. Edmund Keene	Dr. William Cooke	Ely
Sir Wm. Ashburnham	Dr. Charles Harward	Chichester
Dr. John Hume	Dr. Rowney Noel	Salisbury
Dr. Philip Yonge	Dr. Philip Lloyd	Norwich
Dr. Thomas Newton	Dr. J. Hallam	Bristol
Dr. Charles Moss	Lord Fran. Seymour	Bath and Wells
Dr. Jonathan Shipley	Mr. Shipley	St. Asaph
Dr. Edmund Law	Dr. Thomas Wilson	Carlisle
Hon. Dr. S. Barrington	Dr. Adams, Archdeac.	Landaff
Dr. John Hinchcliffe	Dr. Tarrant	Peterborough
Dr. Richard Hurd	Dr. Foley	Worcester
Hon. Dr. James Yorke	Dr. Josiah Tucker	Gloucester
Dr. John Thomas	Dr. Richard Cuff	Rocheſter
Dr. Cornwallis	Dr. Proby	Litchf. and Cov.
Dr. John Moore	Dr. Thomas Lloyd	Bangor
Dr. Beilby Porteus	Dr. William Smith	Chester
Dr. John Butler	Dr. Lewis Bagot	Oxford
Dr. John Rofs	Dr. Jeremiah Mills	Exeter
Dr. Thomas Thurlow	H. Dr. James Yorke	Lincoln
Dr. John Warren	Mr. Wollaston, Prec.	St. David's
	Dr. John Thomas	Westminster
Dr. George Maſon		Sodor and Man
	Hon. John Harley	Windſor

A TABLE of TERMS and their Returns.

HILARY Term begins January 23—ends February 12.

Returns or Effoign Days.	Exc.	Ret.	App.	W. D.
In Eight Days of St. <i>Hilary</i> , - - - Jan. 20	21	22	23	Wedn.
From the Day of St. <i>Hilary</i> in 15 Days, 27	28	29	30	Wedn.
On the Morrow of the Purif. bleff. <i>Mary</i> , Feb. 3	4	5	6	Wedn.
In eight Days of the Purif. of blessed <i>Mary</i> , 9	10	11	12	Tuefd.

EASTER Term begins April 17—ends May 13.

From the Day of Easter in 15 Days, April 14	15	16	17	Wedn.
From the Day of Easter in 3 Weeks, - - 21	22	23	24	Wedn.
From the Day of Easter in 1 Month, - - 28	29	30	M1	Wedn.
From the Day of Easter in 5 Weeks, May 5	6	7	8	Wedn.
On the Morrow of the Ascension, - - - 10	11	12	13	Mond.

TRINITY Term begins May 31—ends June 19.

On the Morrow of the Holy Trinity, May 27	28	29	31	Friday.
In Eight Days of the Holy Trinity, - June 2	3	4	5	Wedn.
In 15 Days of the Holy Trinity, - - - 9	10	11	12	Wedn.
In 3 Weeks of the Holy Trinity, - - - 16	17	18	19	Wedn.

MICHAELMAS Term begins November 6—ends November 28.

On the Morrow of All Souls, - - - Nov 3	4	5	6	Wedn.
On the Morrow of St. <i>Martin</i> , - - - 12	13	14	15	Friday
In Eight Days of St. <i>Martin</i> , - - - 18	19	20	21	Thurf.
In 15 Days of St. <i>Martin</i> , - - - 25	26	27	28	Thurf.

N. B. No Sittings in Westminster-Hall upon *Ascension-Day*, *Midsummer-Day*, and the 2d of *February*.

The *Exchequer* opens Eight Days before any Term begins, except *Trinity*, before which it opens but Four Days.

Note, The First and Last Days of every Term, are the First and Last Days of Appearance.

The Names of the Learned JUDGES in the Law.

I. The Rt. Hon. Ed. Lord Thurlow, Lord High Chancellor of G. Britain,
Right Hon. Sir Thomas Sewell, Knt. Master of the Rolls.

II. In the { Rt. Hon. W. Earl of Mansfield, L.C.J. Edw. Willes, Esq.
K. Bench. { Sir Wm. Henry Ashurst, Knt. Fran. Buller, Esq.

III. In the { Rt. Hon. Al. Ld. Loughborough, L.C.J. H. Gould, Esq.
Co. Pleas. { Sir Geo. Nares, Knt. John Heath, Esq.

IV. In the { Sir John Skynner, Knt. L. C. B. Sir James Eyre, Knt.
Exchequer. { Sir Beaumont Hotham, Knt. Sir Rich. Perryn, Kt.

James Wallace, Esq. Att. Gen. James Mansfield, Esq. Sollic. Gen.

The REGAL Table.

The Year, Month, and Day, when each King and Queen began to reign, accounting the Year to be- gin Jan. 1.				Length of each Reign.			Number of Years expired since their Reigns ended.	
Kings Names	began to reign			Y.	M.	D.	beg	Kings Names
William I.	1066	Oct.	14	20	10	26	695	William 1
William II.	1087	Sept.	9	12	10	24	682	William 2
Henry I.	1100	Aug.	2	35	3	29	647	Henry 1
Stephen	1135	Dec.	1	18	10	24	628	Stephen
Henry II.	1154	Oct.	25	34	8	11	593	Henry 2
Richard I.	1189	July	6	9	9	0	583	Richard 1
John	1199	April	6	17	6	13	566	John
Henry III.	1216	Oct.	19	56	0	28	510	Henry 3
Edward I.	1272	Nov.	16	34	7	21	475	Edward 1
Edward II.	1307	July	7	19	6	18	455	Edward 2
Edward III.	1327	Jan.	25	50	4	27	405	Edward 3
Richard II.	1377	June	21	22	3	8	383	Richard 2
Henry IV.	1399	Sept.	29	13	5	20	369	Henry 4
Henry V.	1413	Mar.	20	9	5	11	360	Henry 5
Henry VI.	1422	Aug.	31	38	6	4	321	Henry 6
Edward IV.	1461	Mar.	4	22	1	5	299	Edward 4
Edward V.	1483	April	9	0	2	13	299	Edward 5
Richard III.	1483	June	22	2	2	0	297	Richard 3
Henry VII.	1485	Aug.	22	23	8	0	273	Henry 7
Henry VIII.	1509	April	22	37	9	6	235	Henry 8
Edward VI.	1547	Jan.	28	6	5	8	229	Edward 6
Q. Mary I.	1553	July	6	5	4	11	224	Q. Mary
Q. Elizabeth	1558	Nov.	17	44	4	7	179	Q. Elizabeth
James I.	1603	Mar.	24	22	0	3	157	James 1
Charles I.	1625	Mar.	27	23	10	3	133	Charles 1
Charles II.	1649	Jan.	30	36	0	7	97	Charles 2
James II.	1685	Feb.	6	4	0	7	93	James 2
Will. 3. & M.	1689	Feb.	13	13	0	23	80	William 3
Q. Anne	1702	Mar.	8	12	4	24	68	Q. Anne
George I.	1714	Aug.	1	12	10	10	55	K. George 1
George II.	1727	June	11	33	4	14	22	K. George 2
George III.	1760	Oct.	25	Crowned Sept. 22, 1761.				

The Use of the following TABLE of the Moon's Southing, to find the Time of High-Water, and the Hour of the Night.

I. To find the Time of High-Water in most Parts of E N G L A N D.

Take the Time of the Moon's Southing for the Day proposed, and to that add the Hours and Minutes which stand against the Place required in the following Table of Sea-Coasts, and the Sum will be the Time of High-Water at the Place required on that Day.

A Table of the Sea Coasts.

	H. M.
Portsmouth, Queenborough, Southampton, ———	0 00
Rochester, Winchelsea, Flushing, — ———	0 45
Downs, Gravesend, Ramkins, Guernsey, ——— —	1 30
Denbigh, Bell-Isle, Holy-Isle, Downs-Road, ———	2 15
London, Tinnmouth, Whitby, Hartlepool, ———	3 00
Scarborough, Berwick, Flushing, Staples, ——— —	3 45
Flamborough, Humber, Bridlington-Bay, ———	4 30
Plymouth, Ramsay, Newcastle, Severn, ——— —	5 15
Lynn, Fosdyke, Hull, Weymouth, Dartmouth, Cross-Keys, —	6 00
Boston, Start-Point, Feulness, Bristol-Key, ———	6 45
Bridgewater, Milford Haven, Lizard, Wintertown, ———	7 30
Yarmouth, Isle of Wight, the Needles, ——— —	8 15
Isle of Man, Orkney, Pool, South-Foreland, ———	9 10
Dover, Harwich, Orfordness, Bullein, ———	10 10
Rye, Solebay, Margate-Road, ——— ———	11 15

II. To find the Hour of the Night by the Shadow of the Moon on a Sun-Dial.

1. When the Shadow falls precisely on the Hour 12, then the Time of the Moon's Southing, found in the preceding Table, is the exact Time of Night. But in other Cases,

2. If the Shadow wants of 12, see how much it wants of it; which Time, subtracted from that of the Moon's Southing, leaves the Time of Night. *Note*, You must add 12 Hours to the Moon's Southing, if Need be.

3. If the Shadow has past 12, add the Time that it has past it to the Time of the Moon's Southing; the Sum will be the Time of Night required; abating 12 Hours from that Sum, if Need be.

A TABLE of the MOON'S SOUTHING, of excellent Use to

M D	January		February		March		April		May		June	
	h	m	h	m	h	m	h	m	h	m	h	m
1	1	m 11	2	m 18	1	m 0	2	m 24	3	m 22	5	m 1
2	2	3	3	6	1	49	2	25	4	26	5	48
3	2	55	3	54	2	40	4	27	5	25	6	31
4	3	44	4	43	3	33	5	29	6	19	7	12
5	4	30	5	35	4	28	6	30	7	8	7	52
6	5	17	6	31	5	27	7	26	7	53	8	31
7	6	4	7	29	6	28	8	17	8	35	9	12
8	6	54	8	30	7	28	9	5	9	15	9	55
9	7	46	9	30	8	27	9	48	9	54	10	42
10	8	43	10	28	9	21	10	28	10	34	11	30
11	9	45	11	22	10	11	11	9	11	16	0 a	21
12	10	47	0 a	13	10	59	11	50	0 a	1	1	15
13	11	46	0	59	11	42	0 a	31	0	47	2	8
14	0 a	44	1	41	0 a	22	1	13	1	37	2	59
15	1	37	2	21	1	3	1	59	2	29	3	48
16	2	25	3	1	1	43	2	46	3	21	4	35
17	3	8	3	41	2	25	3	38	4	14	5	21
18	3	49	4	23	3	8	4	30	5	5	6	6
19	4	29	5	7	3	55	5	24	5	54	6	52
20	5	9	5	55	4	43	6	16	6	42	7	41
21	5	50	6	46	5	35	7	8	7	29	8	33
22	6	32	7	40	6	30	7	58	8	16	9	31
23	7	17	8	36	7	24	8	48	9	5	10	34
24	8	6	9	32	8	19	9	37	9	58	11	40
25	8	59	10	26	9	12	10	27	10	54	morn	
26	9	54	11	19	10	2	11	18	11	50	0	46
27	10	50	morn		10	53	morn		morn		1	47
28	11	46	0	10	11	44	0	14	1	1	2	43
29	morn				morn		1	13	2	7	3	34
30	0	39			0	35	2	16	3	10	4	20
31	1	29			1	28			4	8		

Spring Quarter begins - March 20 d. 11 h. 10 m. forenoon.
 Summer Quarter begins - June 21 9 21 forenoon.
 Autumn Quarter begins - Sept. 22 10 59 night.
 Winter Quarter begins - Dec. 21 3 23 afternoon.

The Moon's Southing.

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find the Time of High-Water, and the Hour of the Night.

M	July		August		September		October		November		December	
	h	m	h	m	h	m	h	m	h	m	h	m
1	5	m 2	5	m 40	6	m 48	7	m 28	8	m 37	8	m 42
2	5	44	6	23	7	42	8	18	9	23	9	33
3	6	24	7	11	8	36	9	8	10	12	10	30
4	7	5	8	1	9	29	9	57	11	3	11	31
5	7	47	8	53	10	20	10	44	11	58	0 a	38
6	8	31	9	46	11	10	11	32	0 a	58	1	46
7	9	20	10	40	11	59	0 a	22	2	2	2	51
8	10	11	11	33	0 a	46	1	15	3	7	3	49
9	11	4	0	24	1	33	2	12	4	12	4	42
10	11	57	1	12	2	24	3	13	5	12	5	29
11	0	49	1	58	3	16	4	15	6	7	6	12
12	1	40	2	44	4	13	5	19	6	56	6	53
13	2	28	3	31	5	13	6	21	7	41	7	34
14	3	15	4	20	6	15	7	18	8	23	8	15
15	4	0	5	12	7	17	8	10	9	4	8	57
16	4	46	6	9	8	17	8	57	9	45	9	41
17	5	33	7	9	9	13	9	41	10	26	10	29
18	6	22	8	13	10	4	10	24	11	8	11	19
19	7	16	9	15	10	52	11	5	11	55	morn	
20	8	15	10	15	11	36	11	46	morn		0	10
21	9	17	11	11	morn		morn		0	43	1	0
22	10	23	morn		0	18	0	29	1	33	1	50
23	11	25	0	1	1	0	1	13	2	25	2	39
24	morn		0	48	1	42	2	0	3	15	3	25
25	0	24	1	32	2	26	2	50	4	5	4	10
26	1	18	2	15	3	11	3	41	4	53	4	53
27	2	7	2	57	3	59	4	33	5	40	5	36
28	2	52	3	39	4	50	5	24	6	24	6	21
29	3	34	4	23	5	42	6	14	7	9	7	8
30	4	17	5	9	6	35	7	3	7	54	8	0
31	4	58	5	57			7	50			8	57

VENUS is an Evening Star till the 20th of March, and after that a Morning Star for the rest of the Year.

JUPITER is a Morning Star to the 15th of June, and then an Evening Star till the End of the Year.

Last Quarter 6 day, at 11 at night.
 New Moon 13 day, at 7 at night.
 First Quarter 21 day, at 1 afternoon.
 Full Moon 29 day, at 9 morning.

M D	Jupiter rises	Venus sets
1	6 m 7	8 a 11
7	5 47	8 21
13	5 26	8 31
19	5 7	8 41
25	4 48	8 48

M D	W D	Holy Days, ☉ rises & sets	☽ rises & sets	☽'s Longit.	☽'s Declin.	Aspects and Weather
1	Tu	Circumcision	5 a 37	28 26	24 n 26	♂ ♀ ☽
2	W	Sun rises 8 4	6 59	15 46	20 30	Cold frosty wea- ther begins the
3	Th	Sun sets 3 57	8 20	29 17	15 27	
4	F		9 4	12 56	9 36	☐ ♂ ♀
5	S	Old Christ.-day	11 7	26 44	3 13	Year.
6	Tu	Epiph. 12th D.	morn	10 39	3 f 22	
7	M	Plow Monday	0 30	24 41	9 51	
8	Tu	Lucian	1 57	8 m 50	15 54	☽ in Perigeo.
9	W		3 24	23 5	21 8	Rain or snow.
10	Th	Sun rises 7 57	4 54	7 24	25 9	
11	F	Sun sets 4 4	6 22	21 42	27 35	* ♀ ☽
12	S	O.N. Year's Day	7 32	5 V 56	28 10	
13	Tu	1 S. aft. Epiph.	☽ sets	19 59	26 56	Hilary
14	M	Ox. & Ca. T. beg	4 a 37	3 47	24 3	
15	Tu		6 2	17 15	19 56	Unsettled and blowing weather.
16	W	Sun rises 7 51	7 23	0 21	14 57	
17	Th	Old 12th Day	8 38	13 5	9 27	
18	F	Q. Ch. b. d. kept	9 51	25 29	3 42	Prisca
19	S	Sun sets 4 14	11 1	7 37	2 n 3	
20	Tu	2 S. aft. Epiph.	morn	19 33	7 38	Fabian
21	M	Agnes	0 12	1 22	12 55	☽ in Apogeo.
22	Tu	Vincent	1 23	13 10	17 44	
23	W	Hil. Term beg.	2 35	25 2	21 53	☐ ♀ ☽
24	Th	Sun rises 7 39	3 49	7 11 4	25 10	Wind and rain in great abundance.
25	F	Conv. St. Paul	5 0	19 21	27 24	
26	S		6 4	1 55	28 16	
27	Tu	Septuagesima	6 58	14 48	27 40	Pr. Aug. Fr. bo
28	M	Sun rises 7 33	7 37	28 0	25 27	
29	Tu	Sun sets 4 29	☽ rises	11 31	21 48	
30	W	K. Cha. I. beh	5 a 54	25 17	16 55	
31	Th		7 20	9 14	11 5	

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	24 ^h 38	22 f 17	15 ^h 32	22 f 9	26 ^h 26	1 f 46	28 ^h 19	13 f 12
7	25 19	22 18	16 48	22 17	0 ^h 35	0 n 1	4 36	10 30
13	25 59	22 18	18 22	22 24	4 44	1 46	10 36	7 45
19	26 39	22 19	19 14	22 31	8 52	3 30	16 19	4 54
25	27 55	22 20	20 24	22 36	13 1	5 13	21 41	2 6

M	☉'s		☉'s	Observations
	Longit.	Declin.		
1	11 19	22 f 59		Clock before the Sun 4 m. 15 sec.
2	12 20	22 54		Saturn rises 6 h. 44 m. morning.
3	13 22	22 48		Jupiter rises 5 h. 53 m. morning.
4	14 23	22 42		Mars sets 10 h. 52 m. afternoon.
5	15 24	22 35		Venus sets 8 h. 17 m. afternoon.
F 6	16 25	22 28		Seven Stars south at 8 h. 21 m. afternoon.
7	17 26	22 20		☿ greatest Elong. from ☉.
8	18 27	22 13		
9	19 29	22 3		Day breaks 5 h. 58 min.
10	20 30	21 54		Day increased 20 minutes.
11	21 32	21 45		Saturn rises 6 h. 9 m. morning.
12	22 32	21 35		Jupiter rises 5 h. 30 m. morning.
F 13	23 33	21 25		Mars sets 10 h. 48 m. afternoon.
14	24 34	21 14		Venus sets 8 h. 33 m. afternoon.
15	25 36	21 3		Clock before the Sun 10 m. 25 sec.
16	26 37	20 52		
17	27 38	20 40		
18	28 39	20 27		Length of Day is 8 h. 26 min.
19	29 40	20 15		☉ enters ♍ 7 h. 52 m. afternoon.
F 20	0 ^h 41	20 2		
21	1 42	19 48		Seven Stars south at 7 h. 17 m. afternoon.
22	2 43	19 35		Day breaks at 5 h. 43 m.
23	3 44	19 21		
24	4 45	19 6		Days are increased 57 min.
25	5 46	18 51		Twilight ends at 6 h. 21 m.
26	6 47	18 36		
F 27	7 48	18 21		Saturn rises at 5 h. 8 m. morning.
28	8 49	18 5		Jupiter rises at 4 h. 27 m. morning.
29	9 50	17 49		Mars sets at 10 h. 44 m. afternoon.
30	10 50	17 32		Venus sets at 8 h. 53 m. afternoon.
31	11 51	17 15		

Last Quarter 5 day, at 7 morning.
 New Moon 12 day, at 9 morning.
 First Quarter 20 day, at 10 morning.
 Full Moon 27 day, at 9 night.

M	Jupiter	Venus
D	rises	sets
1	4m 25	8 a 54
7	4 7	8 56
13	3 48	8 54
19	3 31	8 49
25	3 13	8 46

M	W	Holy Days,	D rises	D's	D's	Aspects and
D	D	○ rises & sets	& sets	Longit.	Declin.	Weather
1	F	Purif. Candl.	8 a 45	23 17 19	4 n 38	♄ ☉ ♀, ☐ ♄ ♀
2	S	Sexagesima	10 9	1 27	2 f 5	☽ in Perigeo.
3	F		11 35	21 36	8 42	<i>Blaze</i>
4	M		morn	5 m 45	14 54	
5	Tu	Agatha	1 2	19 51	20 18	* ♂ ♀
6	W		2 35	3 54	24 32	♄ ♄ ♂, * ♄ ♀
7	Th	Sun rises 7 16	3 59	17 53	27 18	Windy turbulent
8	F	Sun sets 4 46	5 15	1 v 46	28 20	weather.
9	S	Quinquagesim.	6 13	15 31	27 37	* ♄ ♀
10	F		6 54	29 7	25 14	
11	M	Shrove-Tues.	7 21	12 29	21 31	* ☉ ♀
12	Tu	Ash-Wednesd.	☽ sets	25 36	16 47	☿ in Term ends
13	W		6 a 15	8 28	11 23	Dark and cold days
14	Th	Valentine	7 29	21 2	5 38	now,
15	F		8 41	3 v 1	on 13	
16	S	Sun rises 7 0	9 52	15 26	5 56	* ☉ ♂
17	F	Quadr. 13 in L.	11 3	27 21	11 24	* ☉ ♄
18	M		morn	9 10	16 44	♄ ♄ ♂, ☽ in Ap.
19	Tu	Sun sets 5 7	0 16	20 58	20 48	
20	W	Ember week	1 28	2 50	24 28	Clofe foggy or
21	Th		2 41	14 52	26 58	rainy weather.
22	F	Sun rises 6 48	3 50	27 8	28 18	
23	S	1. Octavius 68	4 48	9 44	28 13	Pr. Adol. Fr. b.
24	F	2 S. in L. St. Mat.	5 34	22 41	26 36	
25	M		6 5	6 21	23 31	☐ ♄ ♀
26	Tu	Sun rises 6 40	6 31	19 45	19 20	
27	W		☽ rises	3 50	13 25	Driving winds,
28	Th	Sun sets 5 24	6 a 22	18 11	6 57	with snow or
						flect.

W I N O, February 1782.

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M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	27 ¹ 56	22 f 21	21 ¹ 44	22 f 41	17 ¹ 50	7 n 11	27 ¹ 20	1 n 3
7	28 29	22 21	22 47	22 46	21 57	8 49	1 37	3 37
13	29 0	22 22	23 46	22 49	26 3	10 25	4 54	5 54
19	29 27	22 22	24 42	22 51	0 8	9 11	58 7	23 7
25	29 53	22 21	25 33	22 53	4 15	13 28	8 39	0 20

M	☉'s		☉'s		Observations
	Longit.	Declin.	Longit.	Declin.	
1	12 ¹ 52	16 f 58			Clock before the Sun 14 m. 7 sec.
2	13 53	16 41			Saturn rises at 4 h. 45 m. morning.
F 14	54 16	23			Jupiter rises at 4 h. 19 m. morning.
4	15 55	16 5			Mars sets at 10 h. 44 m. evening.
5	16 55	15 47			Venus sets at 8 h. 55 m. evening.
6	17 56	15 29			Seven Stars south at 6 h. 11 m. afternoon.
7	18 57	15 10			
8	19 57	14 51			Day is 9 h. 32 m. long.
9	20 58	14 32			Days are increased 1 h. 51 min.
F 21	59 14	12			
11	22 59	13 52			Saturn rises at 4 h. 14 m. morning.
12	24 0	13 32			Jupiter rises at 3 h. 54 m. morning.
13	25 1	13 12			Mars sets at 10 h. 44 m. at night.
14	26 1	12 52			Venus sets at 8 h. 53 m. at night.
15	27 2	12 31			
16	28 2	12 10			Clock before the Sun 14 m. 29 sec.
F 29	3 11	49			Day breaks at 5 h. 4 min.
18	0 ¹ 3	11 28			☉ enters ♋ 10 h. 43 m. morning.
19	1 4	11 7			Days are increased 2 h. 29 m.
20	2 4	10 45			Day is 10 h. 18 m. long.
21	3 4	10 23			Seven Stars south at 5 h. 13 m. afternoon.
22	4 5	10 2			
23	5 5	9 40			Saturn rises at 3 h. 39 m. morning.
F 6	5 9	17			Jupiter rises at 3 h. 16 m. morning.
25	7 5	8 55			Mars sets at 10 h. 46 m. at night.
26	8 6	8 33			Venus sets at 8 h. 45 m. at night.
27	9 6	8 10			
28	10 6	7 48			☿ greatest elong. from ☉.

Last Quarter 6 day, at 3 afternoon.
 New Moon 14 day, at 1 morning.
 First Quarter 22 day, at 5 morning.
 Full Moon 29 day, at 8 morning.

M D	Jupiter rises	Venus sets
1	2 m 58	8 a 26
7	2 39	8 0
13	2 20	7 24
19	2 0	rises
25	1 40	4 m 52

M D	W D	Holy Days, ☉ rises & sets	☉ rises & sets	☉'s Longit.	☉'s Declin.	Aspects and Weather
1	F	<i>David</i>	7 a 50	2 43	0 n 4	☉ in Perigeo.
2	S	<i>Chad</i>	9 20	17 19	6 f 52	
3	F	<i>3^d Sund. in Lent</i>	10 51	11 m 53	13 26	☐ ♄ ♀
4	M	Sun rises 6 29	morn	16 21	19 14	
5	Tu		0 21	0 39	23 52	High winds, with rain or hail.
6	W	Sun sets 5 36	1 53	14 44	27 0	
7	Th	<i>Perpetua</i>	3 13	28 37	28 26	
8	F		4 15	12 16	28 5	
9	S	Sun rises 6 19	5 1	25 40	26 6	
10	F	<i>4, or Midl. S.</i>	5 29	8 52	22 44	
11	M		5 51	21 49	18 17	More serene and pleasant weather.
12	Tu	<i>Gregory</i>	6 8	4 33	13 6	
13	W		6 20	17 5	7 28	
14	Th	Sun rises 6 9	☉ sets	29 24	1 23	
15	F	Sun sets 5 54	7 a 42	11 33	4 n 11	
16	S		8 54	23 32	9 46	♂ ☉ ♀, ☐ ♄ ♀
17	F	<i>5^d Sund. in Lent</i>	10 7	5 24	14 58	<i>St. Patrick</i>
18	M	<i>Edw. K. W. S.</i>	11 20	17 12	19 36	☐ ☉ ♄, ☉ in Ap.
19	Tu	Sun rises 5 59	morn	29 0	23 28	Dark and cloudy.
20	W		0 33	10 53	26 22	
21	Th	<i>Benedict</i>	1 42	22 53	28 7	♂ ☉ ♀, ☐ ☉ ♄
22	F	Camb. T. ends	2 43	5 1	28 33	* ♂ ♀
23	S	Oxf. Ter. ends	3 34	17 39	27 32	
24	F	<i>Palm-Sunday</i>	4 11	0 32	25 4	☐ ♄ ♀
25	M	<i>Annun. Lady-d</i>	4 40	13 51	21 11	
26	Tu	Sun rises 5 45	5 0	27 35	16 3	Cold and wet wea- ther.
27	W		5 15	11 46	9 56	
28	Th	<i>Maundy-Thurs.</i>	5 30	26 19	3 8	
29	F	<i>Good-Friday</i>	☉ rises	11 8	3 f 59	* ♂ ♀
30	S	Sun sets 6 24	8 29	26 7	10 57	☉ in Perigeo.
31	F	<i>Easter-Day</i>	10 4	11 m	17 18	

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	0 30	22 21	26 4	22 1	6 8	57 14 n	23 8	43 9 n
7	0 30	22 21	26 4	22 1	6 8	57 14 n	23 8	43 9 n
13	0 47	22 21	27 22	22 55	11 3	15 45	7 34	10 18
19	1 1	22 20	27 54	22 57	19 8	18 14	1 32	8 22
25	1 12	22 20	28 19	22 57	23 9	19 21	27 49	6 23

M	☉'s		☉s	Observations
	Longit.	Declin.		
1	11 6	7 1	25	Clock before the Sun 12 m. 37 sec.
2	12 6	7 2		Saturn rises at 3 h. 7 m. morning.
F 13	6 6	39		Jupiter rises at 2 h. 52 m. morning.
4	14 6	6 16		Mars sets at 10 h. 47 m. at night.
5	15 6	5 53		Venus sets at 8 h. 12 m. at night.
6	16 6	5 29		Seven Stars south at 4 h. 25 m. afternoon.
7	17 6	5 6		
8	18 6	4 43		Day is 11 h. 20 m. long.
9	19 6	4 19		Days are increased 3 h. 39 m.
F 20	5 3	56		
11	21 5	3 32		Saturn rises at 2 h. 36 m. morning.
12	22 5	3 9		Jupiter rises at 2 h. 23 m. morning.
13	23 5	2 45		Mars sets at 10 h. 50 m. at night.
14	24 5	2 21		Venus sets at 7 h. 18 m. evening.
15	25 4	1 58		
16	26 4	1 34		Clock before the Sun 8 m. 47 sec.
F 27	3 1	10		Day breaks at 4 h. 9 m.
18	28 3	0 47		Day and night each 12 h. long.
19	29 3	0 23		
20	0 2	0 n	1	☉ enters ♍ 11 h. 10 m. forenoon.
21	1 1	0 24		Seven Stars south at 3 h. 30 m. afternoon.
22	2 1	0 48		
23	3 0	1 12		Saturn rises at 1 h. 55 m. morning.
F 4	0 1	35		Jupiter rises at 1 h. 43 m. morning.
25	4 59	1 59		Mars sets at 10 h. 53 m. at night.
26	5 58	2 22		Venus sets at 4 h. 49 m. morning.
27	6 57	2 46		
28	7 57	3 9		☽ eclipsed, invisible.
29	8 56	3 33		Day is 12 h. 44 m. long.
30	9 55	3 56		Days are increased 5 h. 3 m.
F 10	54 4	19		Day breaks at 3 h. 34 m.

Last Quarter 4 day, at 11 at night.
 New Moon 12 day, at 6 evening.
 First Quarter 20 day, at 9 at night.
 Full Moon 27 day, at 5 evening.

M D	Jupiter rises	Venus rises
1	1 m 18	4 m 26
7	o 57	4 8
13	o 36	3 53
19	o 13	3 40
25	11 a 48	3 27

M D	W D	Holy Days, Orises and sets	D rises & sets	D's Longit.	D's Declin.	Aspects and Weather
1	M	Easter-Mond.	11 a 40	25 m 59	22 f 34	Mild weather, and warm, with sometimes fruitful show- ers.
2	Tu	Easter-Tuesd.	morn	10 2 37	26 20	
3	W	Richard	1 8	24 57	28 18	
4	Th	St. Ambrose	2 18	3 v 56	28 25	
5	F	Old Lady-Day	3 9	22 33	26 46	
6	S		3 44	5 49	23 41	
7	F	Low Sunday	4 6	18 46	19 28	♂ ♀ ☿ Cold bleak winds.
8	M	Sun rises 5 19	4 25	1 27	14 28	
9	Tu	Sun sets 6 43	4 35	13 53	8 58	
10	W	Ox.&Ca.T.beg	4 44	26 7	3 13	
11	Th		4 56	8 v 12	2 n 34	
12	F	Sun rises 5 12	D sets	20 10	8 13	
13	S	Sun sets 6 51	8 a 1	2 8	2 13 33	D in Apogeo. More warm and wet.
14	F	2 S. aft. Easter	9 14	13 51	18 21	
15	M		10 29	25 40	22 28	
16	Tu	Sun rises 5 4	11 37	7 II 29	25 39	
17	W	East. T. begins	morn	19 23	27 44	
18	Th		0 41	1 25	28 34	
19	F	Alphege	1 39	13 39	28 1	△ ○ ♀ □ ♀
20	S	Sun sets 7 5	2 20	26 8	26 3	△ ○ h Variable weather for some days.
21	F	3 S. aft. Easter	2 48	8 57	22 45	
22	M		3 11	22 8	18 11	
23	Tu	St. George	3 29	5 m 15	12 36	
24	W		3 42	19 49	6 11	
25	Th	St. Mark	4 56	4 19	0 f 42	
26	F		4 9	19 10	7 46	D in Perigeo. * ♂ ♀ □ ♀
27	S	Sun rises 4 44	D rises	4 m 18	4 31	
28	F	4 S. aft. Easter	9 a 10	19 32	0 25	
29	M		10 44	4 42	24 59	
30	Tu	Sun sets 7 23	morn	19 40	27 45	

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	11 ²⁰	22 1 20	28 x 42	22 1 58	27 0 49	20 n 31	24 x 22	3 n 55
7	1 24	22 20	28 55	22 58	1 1 48	21 25	22 45	2 4
13	1 23	22 19	29 c 22	58	5 47	22 12	22 38	0 49
19	1 19	22 19	28 50	22 59	9 44	22 53	23 51	0 8
25	1 12	22 19	28 50	22 59	13 41	23 27	26 12	0 2

M	☉'s	☉'s	Observations
D	Longit.	Declin.	
1	11 ²⁰	4 n 42	Clock before the Sun 3 m. 52 sec.
2	12 52	5 5	Saturn rises at 1 h. 21 m. morning.
3	13 51	5 28	Jupiter rises at 1 h. 11 m. morning.
4	14 50	5 51	Mars sets at 10 h. 56 m. at night.
5	15 49	6 14	Venus rises at 4 h. 14 m. morning.
6	16 48	6 37	Seven Stars south 2 h. 32 m. afternoon.
F 17	47	6 59	
8	18 46	7 22	Day is 13 h. 24 m. long.
9	19 44	7 44	Days are increased 5 h. 42 min.
10	20 43	8 6	Day breaks at 3 h. 10 min.
11	21 42	8 28	
12	22 41	8 50	☉ eclipsed, visible.
13	23 39	9 12	☿ greatest elong. from ☉:
F 24	38	9 33	
15	25 37	9 55	Clock is with the Sun.
16	26 35	10 16	
17	27 34	10 37	
18	28 32	10 58	Twilight ends at 9 h. 13 m.
19	29 31	11 19	☉ enters ☾ 11 h. 59 m. forenoon.
20	0 29	11 39	
F 1	28 12	0	Seven Stars south at 1 h. 36 m. afternoon.
22	2 26	12 20	
23	3 24	12 40	Saturn rises at 0 h. 2 m. morning.
24	4 23	13 0	Jupiter rises at 11 h. 52 m. at night.
25	5 21	13 19	Mars sets at 10 h. 54 m. at night.
26	6 19	13 39	Venus rises at 3 h. 25 m. morning.
27	7 17	13 58	
F 8	16 14	17	Day is 14 h. 38 m. long.
29	9 14	14 35	Days are increased 6 h. 56 min.
30	10 12	14 44	Day breaks at 2 h. 12 min.

Last Quarter 4 day, at 9 morning.
 New Moon 12 day, at 10 morning.
 First Quarter 20 day, at 9 morning.
 Full Moon 27 day, at 1 morning.

M D	Jupiter rises	Venus rises
1	11 a 2	3 m 16
7	10 5	3 5
13	10 33	2 54
19	10 7	2 43
25	9 40	2 32

M D	W D	Holy Days, ☉ rises and sets	☉ rises & sets	☉'s Longit.	☉'s Declin.	Aspects and Weather
1	W	St. Phil. & Jam.	0 m 10	4 ^v 16	28 f 32	Cloudy weather,
2	Th		1 11	18 28	27 23	perhaps rain.
3	F	Inw. of Cross	1 50	2 ^m 12	24 35	☐ ♀
4	S	Sun rises 4 32	2 17	15 29	20 34	
5	F	Rogat. Sunday	2 37	28 22	15 41	
6	M	St. John, A.P.L.	2 51	10 ^x 55	10 16	△ ♀
7	Tu		3 2	23 12	4 34	△ ♀
8	W	Sun sets 7 36	3 11	5 ^v 16	1 n 12	Driving winds,
9	Th	Ascension	3 21	17 11	6 15	mixed with rain,
10	F		3 32	29 2	12 14	for several days.
11	S	Sun rises 4 20	3 44	10 ^x 50	17 10	☉ in Apogeo
12	S	S. aft. Ascension	☉ sets	22 38	21 27	
13	M	Easter T. ends	9 a 33	4 ^{II} 29	24 53	
14	Tu		10 40	16 23	27 15	
15	W	Sun sets 7 47	11 37	28 24	28 23	
16	Th	Oxf. T. ends	morn	10 [☉] 32	28 10	♂ ♀, ☐ ♀
17	F		0 21	22 50	26 34	
18	S	Sun rises 4 10	0 54	5 [☉] 22	23 39	
19	F	Whit-S. Dunst.	1 17	18 9	19 32	Q. Charl. born
20	M	Whit-Monday	1 35	1 ^m 16	14 24	♂ ♀
21	Tu	Whit-Tuesday	1 50	14 45	8 27	♂ ☉
22	W	Ember-Week	2 3	28 38	1 55	Frs Eliz. born
23	Th		2 15	12 ^m 55	4 f 55	Moderate and fine
24	F	Sun rises 4 2	2 27	27 36	11 40	weather towards
25	S	Sun sets 8 1	2 44	12 ^m 36	17 53	the end.
26	F	Trinity-Sund.	2 3	27 48	23 5	Augustine, A.B.
27	M	Ven. Bede	☉ rises	13 [♂] 1	26 42	
28	Tu		10 a 54	28 6	28 21	
29	W	K. Ch. II. Rest.	11 45	12 ^v 53	27 56	Oxf. T. begins
30	Th	Corpus Christi	morn	27 14	25 38	
31	F	Trin. T. begins	0 1	11 ^m 6	21 52	

M.	Saturn	Jupiter	Mars	Venus				
Di.	Long.	Declin.	Long.	Declin.	Long.	Declin.	Long.	Declin.
1	15 2 22 19	28 1 39 22 19	59 17 11 37 23 19	54 29 32 29	0 25			
7	0 48 22 19	28 17 22 59	21 31 24 14	3 32 1	1			
13	0 31 22 19	27 51 22 59	25 25 24 27	8 5 2	20			
19	0 12 22 19	27 20 22 59	29 19 24 32	13 6 3	51			
25	29 50 22 10	16 42 22 54	3 12 24 31	18 31 4	19			

M.	Sun's Longit.	Sun's Declin.	Observations
1	11 8 10	15 n 12	Clock after the Sun 3 min. 10 sec.
2	12 8 15	30	Saturn rises at 11 h. 25 min. at night
3	13 6 15	47	Jupiter rises at 11 h. 11 min. at night
4	14 4 16	5	Mars sets at 10 h. 50 min. at night
F 15	2 16	22	Venus rises at 3 h. 9 min. morning
6	16 0 16	39	Seven Stars South at 0 h. 58 m. afternoon
7	16 58 16	56	
8	17 56 17	12	Day is 15 hours 12 minutes long
9	18 54 17	28	Days are increased 7 hours 31 minutes
10	19 52 17	44	
11	20 50 17	59	Saturn rises at 10 h. 53 min. at night
F 21	48 18	14	Jupiter rises at 10 h. 39 min. at night
3	22 46 18	29	Mars sets at 10 h. 43 min. at night
4	23 43 18	44	Venus rises at 3 h. 3 min. morning
5	24 41 18	58	
6	25 39 19	12	Clock after the Sun 4 minutes
7	26 37 19	25	Day breaks at 1 o'clock
8	27 34 19	39	Twilight ends at 11 h. 54 min.
9	28 32 19 n	52	
10	29 30 20	4	Seven Stars South at 11 h. 45 m. forenoon
11	0 27 20	16	Sun enters II 0 h. 37 min. morning
12	1 25 20	28	
13	2 23 20	40	Day is 15 hours 56 minutes long
14	3 20 20	51	Days are increased 8 hours 13 minutes
15	4 18 21	2	All Day, or Twilight, till July the 23d.
16	5 15 21	12	
17	6 13 21	22	♀ greatest Elong. from Sun
18	7 10 21	32	
19	8 8 21	41	Day is 16 hours 10 minutes long
20	9 5 21	50	Days are increased 8 hours 27 minutes
21	10 2 21	59	

Lunations

Last Quarter the 2d day, at 9 at night
 New Moon the 11th day, at 1 in morning
 First Quarter the 18th day, at 5 in aftern.
 Full Moon the 25th day, at 8 in morning

M	Jupiter	Venus
D	rises	rises
1	9 a 8	2 m 16
7	8 4c	2 5
13	sets	1 51
19	3 m 33	1 43
25	3 5	1 12

M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather
1	S	Nicomede	0 m 40	24 m 29	17 f 4	Δ 4 ♀
2	F	1 S. aft. Trin.	0 55	7 K 25	11 40	8 4 ♀
3	M		1 7	19 57	5 57	
4	T	K. G. III. bo.	1 17	2 V 11	0 8	Δ 4 ♀, 8 4 ♀
5	W	Pr. Er. Aug. b.	1 27	14 12	5 n 34	Bonifa. (* ♀ ♀)
6	T	Sun rises 3 49	1 37	26 4	11 2	
7	F		1 49	7 8 52	16 3	
8	S	Sun sets 8 13	2 2	19 39	20 29	D in Apogeo
9	F	2 S. aft. Trin.	2 22	1 II 30	24 7	
10	M	Prs. Amelia b.	2 47	13 26	26 45	Some thunder
11	T	St. Barnabas	D sets	25 28	28 10	showers about
12	W		10 a 18	7 39	28 15	this time.
13	T	Sun rises 3 45	10 53	19 59	26 56	
14	F	Sun sets 8 16	11 20	2 29	24 16	6 ♂ ♀
15	S		11 38	15 10	20 24	8 ☉ 4
16	F	3 S. aft. Trin.	11 53	28 4	15 31	
17	M	St. Alban	morn	11 m 14	9 50	Good summer
18	T		0 5	24 40	3 36	weather for hay
19	W	Trin. T. ends	0 17	8 26	2 f 58	8 ☉ 4
20	T	T. Ed. K. W. S	0 28	22 31	9 33	harvest.
21	F	Longest Day	0 42	6 m 56	15 47	
22	S	Day 16 34	0 58	21 39	21 14	
23	F	4 S. aft. Trin.	1 23	6 f 35	25 25	D in Perigeo
24	M	St. John Bapt.	2 2	21 35	27 52	
25	T		D rises	6 31	28 17	
26	W	Sun rises 3 43	10 a 9	21 13	26 41	Winds, but
27	T	Sun sets 8 16	10 36	5 m 33	23 22	mostly dry
28	F		10 54	19 27	18 48	weather.
29	S	St. Peter	11 8	2 K 53	13 25	
30	F	5 S. aft. Trin.	11 19	15 52	7 38	

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Saturn				Jupiter				Mars				Venus						
D		Long.		Decl.		Long.		Decl.		Long.		Decl.		Long.		Decl.		
1	49	25	22	20	25	50	12	38	5	42	24	n	21	25	12	7	n	30
7	48	57	22	20	25	6	22	57	11	34	24	5	1	10	9	34		
13	48	31	22	20	24	21	22	56	15	25	23	43	7	18	11	28		
19	48	4	22	20	23	35	22	54	19	15	23	14	13	35	13	22		
25	47	38	22	20	22	51	22	53	23	5	22	39	20	1	15	12		

M	Sun's	Sun's	Observations	
D	Longit.	Declin.		
1	11	0	22	n 7
F	11	57	22	15
3	12	55	22	23
4	13	52	22	30
5	14	49	22	36
6	15	47	22	43
7	16	44	22	48
8	17	42	22	54
F	18	39	22	59
10	19	36	23	4
11	20	34	23	8
12	21	31	23	12
13	22	28	23	15
14	23	26	23	18
15	24	25	23	21
F	25	20	23	23
17	26	17	23	25
18	27	15	23	26
19	28	12	23	27
20	29	9	23	28
21	0	6	23	28
22	1	4	23	28
F	2	1	23	27
24	2	58	23	26
25	3	55	23	25
26	4	52	23	23
27	5	49	23	21
28	6	47	23	18
29	7	44	23	15
F	8	41	23	11
Clock after the Sun 2 min 38 sec.				
Saturn rises at 9 h. 14 min. evening				
Jupiter rises at 8 h. 58 min. evening				
Mars sets at 10 h. 14 min. evening				
Venus rises at 2 h. 9 min. morning				
Seven Stars south 10 h. 36 min. forenoon				
Day 16 hours 26 minutes long				
Saturn rises at 8 h. 38 min. evening				
Jupiter rises at 8 h. 20 min. evening				
Mars sets at 10 at night				
Venus rises at 1 h. 53 min. morning				
Clock and Sun are together				
Day is 16 hours 32 minutes long				
Days are increased 8 h. 50 min. which is				
their greatest increase				
Seven Stars south at 9 h. 38 m. forenoon				
Sun enters ☐ 9 h. 21 min. forenoon				
Longest day is 16 hours 34 minutes				
☿ greatest Elong. from the Sun				
Days are decreased 1 minute				
Sun is east at 7 h. 20 min. morning				
Day is 16 hours 30 minutes long				

Lunations						M D	Jupiter sets	Venus rises
Last Quarter the 2d day, at noon						1	2 m 37	1 m 24
New Moon the 10th day, at 3 afternoon						7	2 11	1 17
First Quarter the 17th day, at 11 at night						13	1 44	1 11
Full Moon the 24th day, at 3 in afternoon						19	1 17	1 9
						25	0 51	1 0
M D	W D	Holy-Days ☉ rises & sets	☾ rises & sets	Moon's Longit.	Moon's Declin.	Aspects and Weather		
1	M		11 a 30	28 X 27	1 f 42			
2	T	Visit. V. Mar.	11 40	10 V 42	4 n 9	* ♂ ♀		
3	W	Asc. days beg.	11 51	22 43	9 44	Thunder showers		
4	T	Tr. St. Mart.	morn	4 8 35	14 54	expected		
5	F	Cam. T. ends	0 4 16	24 19	30 30	☾ in Apogeo		
6	S	Oxford Act.	0 19 28	14 23	21 21			
7		St. S. aft. Trin.	0 42 10	11 8 26	14 14	Tho. à Becket		
8	M		1 14 22	11 27	57 57	Close foggy		
9	T	Sun rises 3 51	1 27 4	23 28	22 22			
10	W		☾ sets 16	47 27	21 21	* ♀ ♂		
11	T	Sun sets 8 7	9 a 17	29 22	24 57			
12	F		9 38 12	9 21 16	16 16	mornings,		
13	S	Oxf. T. ends	9 55 25	8 16 31	16 31	but fine days		
14		St. S. after Trin.	10 8 8	17 10 57	10 57			
15	M	St. Swithin	10 19 21	39 4 48	4 48	♂ ♂ ♂		
16	T		10 32 5	12 1 f 40	1 f 40			
17	W	Sun rises 3 58	10 45 18	59 8 9	9 9	Fine seasonable		
18	T		10 59 2 m	59 14 21	21 21	weather some		
19	F	Sun sets 7 58	11 19 17	12 19 54	54 54	days		
20	S	St. Margaret	11 49 1	1 37 24	22 22	☾ in Perigeo		
21		St. S. aft. Trin.	morn. 16	10 27 20	20 20	8 ♀ ♀		
22	M	Mary Magd.	0 32 0	47 28 26	26 26	♂ ☉ ♂		
23	T		1 38 15	21 27 34	34 34			
24	W	Sun rises 4 7	☾ rises 29	44 24 51	51 51	Some showers		
25	T	St. James	8 a 55 13	51 20 41	41 41	may be		
26	F	S. An. M. V. M	9 9 27	36 15 29	29 29			
27	S		9 22 10	57 9 41	41 41	8 ♀ ♀		
28		St. S. aft. Trin.	9 32 23	54 3 39	39 39			
29	M		9 44 6	29 2 n 22	22 22	expected		
30	T	Sun sets 7 43	9 54 18	46 8 9	9 9			
31	W		10 7 0	8 48 13	32 32			

M		Saturn		Jupiter		Mars		Venus	
D		Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	2	13	22	1	20	22	1	20	22
7	26	48	22	20	21	29	22	50	0
13	26	25	22	21	20	53	22	49	4
19	26	3	22	21	20	22	22	48	8
25	25	43	22	21	19	55	22	47	12
									10
									18
									17
									23
									36
									21
									35

M	Sun's D	Longit.	Sun's Declin.	Observations
1	9	38	23 n 7	Clock before the Sun 3 min. 20 sec.
2	10	35	23 3	
3	11	33	22 58	Day is 16 hours 26 minutes long
4	12	30	22 53	Days are decreased 9 minutes
5	13	27	22 47	
6	14	24	22 41	Seven Stars south at 8 h. 33 m. morning
F	15	21	22 35	
8	16	19	22 28	
9	17	10	22 21	Saturn sets at 2 h. 28 min. morning
10	18	13	22 14	Jupiter sets at 1 h. 57 min. morning
11	19	10	22 6	Mars sets at 8 h. 56 min. evening
12	20	8	21 58	Venus rises at 1 h. 12 min. morning
13	21	5	21 49	
F	22	2	21 40	Day is 16 hours 8 minutes long
15	22	59	21 31	Days are decreased 27 minutes
16	23	57	21 21	Clock before the Sun 5 min. 35 sec.
17	24	54	21 11	
18	25	51	21 0	Day is 15 hours 58 minutes long
19	26	49	20 49	Sun is due east at 7 h. 11 min.
20	27	46	20 38	
F	28	43	20 27	Seven Stars south at 7 h. 32 m. morning
22	29	40	20 15	Sun enters Ω 8 h. 11 min. afternoon
23	0	Ω 38	20 3	
24	1	35	19 50	Saturn sets at 1 h. 24 min. morning
25	2	32	19 37	Jupiter sets at 0 h. 51 min. morning
26	3	30	19 24	Mars sets at 8 h. 20 min. evening
27	4	27	19 10	Venus rises at 1 h. 9 min. morning
F	5	24	18 57	
29	6	23	18 42	Day breaks at 1 h. 9 min.
30	7	19	18 28	Day is 15 hours 26 minutes long
31	8	17	18 13	Twilight ends at 10 h. 42 min.

Lunations

Last Quarter the 1st day, at 4 in the morning

New Moon the 9th day, at 3 in the morning

First Quarter the 16th day, at 4 in the morning

Full Moon the 23d day, at 1.

Last Quarter the 30th day, at 10 at night

D	Jupiter sets	Venus rises
1	0 m 22	1 m 13
7	11 a 59	1 20
13	11 36	1 30
19	11 14	1 44
25	10 52	1 57

M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather
1	T	Lammas	10 a 20	12 8 42	18 n 22	
2	F	Sun rises 4 21	10 41	24 32	22 27	☽ in Apogeo
3	S		11 9	6 II 24	25 38	Some rains with
4	F	10 S. aft. Trin.	11 47	18 22	27 42	wind
5	M		morn	0 30	28 30	△ 24 ♂
6	T	Transfigurat.	0 38	12 51	27 54	
7	W	Name of Jesus	1 45	25 27	25 52	Very hot sultry
8	T		3 2	8 Ω 19	22 29	weather
9	F	Sun sets 7 27	☽ sets	21 25	17 55	
10	S	St. Laurence	8 a 16	4 m 45	12 24	
11	F	11 S. aft. Trin. Prs. Br. b.		18 17	6 14	Dog-days end
12	M	Pr. of Wales b.	8 40	2 0	0 f 17	△ ☉ 24
13	T		8 52	15 51	6 53	
14	W	Sun rises 4 41	9 6	29 49	13 13	△ ♀ ♂
15	T	Sun sets 7 16	9 24	13 m 54	18 55	
16	F	Pr. Fred. bo.	9 50	28 3	23 36	☽ in Perigeo
17	S		10 27	12 ♄ 16	26 54	△ ☉ ♀
18	F	12 S. aft. Trin.	11 24	26 31	28 29	Heavy showers,
19	M		morn	10 ♄ 43	28 11	
20	T	Sun rises 4 52	0 37	24 49	26 2	with lightning
21	W	Pr. W. Hen. b.	2 4	8 46	22 21	
22	T		3 33	22 29	17 30	and thunder.
23	F	Sun sets 7 2	☽ rises	5 ✕ 55	11 53	
24	S	St. Barthol.	7 a 42	19 3	5 52	☉ ☽, △ 24 ♂
25	F	13 S. aft. Trin.	7 55	1 ♄ 51	0 n 16	
26	M	Sun rises 5 3	8 6	14 22	6 15	△ ♀ ♂
27	T		8 16	26 3	11 52	Sultry and close
28	W	St. Augustine	8 30	8 8 39	16 57	weather.
29	T	Beh. J. Bapt.	8 49	20 33	21 21	
30	F		9 12	2 II 24	24 51	☽ in Apogeo
31	S	Sun sets 6 47	9 45	14 17	27 18	

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	25 23	22 f 21	19 33	22 f 46	16 38	16 n 58	1 42	22 n 4
7	25 9	22 22	19 20	22 46	20 27	15 48	8 43	22 7
13	24 59	22 22	19 14	22 47	24 16	14 32	15 45	21 48
19	24 52	22 23	19 15	22 48	28 5	13 14	22 51	21 7
25	24 48	22 24	19 22	22 49	1 53	11 51	0 0	20 5

M	Sun's		Sun's		Observations
D	Longit.	Declin.	Longit.	Declin.	
1	9 14	17 n 58			Clock before the Sun 5 min. 52 seconds
2	10 11	17 43			
3	11 9	17 27			Saturn sets at 0 h. 43 min. morning
F 12	6 17	11			Jupiter sets at 0 h. 11 min. morning
5	13 4	16 55			
6	14 2	16 38			Seven Stars south at 6 h. 29 min. morning
7	14 59	16 22			
8	15 57	16 5			Mars sets at 7 h. 48 min. evening
9	16 54	15 47			Venus rises at 1 h. 23 min. morning
10	17 52	15 30			
F 18	50 15	12			☿ greatest Elong. from ☉.
12	19 47	14 54			
13	20 45	14 36			Day is 14 hours 40 minutes long
14	21 43	14 17			Days are decreased 1 hour 55 minutes
15	22 40	13 58			
16	23 38	13 40			Clock before the Sun 3 min. 53 seconds
17	24 36	13 20			
F 25	34 13	1			Saturn sets at 11 h. 44 min. at night
19	26 31	12 41			Jupiter sets at 11 h. 36 min. at night
20	27 29	12 22			
21	28 27	12 2			Seven Stars south at 5 h. 32 min. morning
22	29 25	11 42			
23	0 23	11 21			Sun enters ♊ 2 h. 32 min. morning
24	1 21	11 1			
F 2	19 10	40			Mars sets at 7 h. 5 min. evening
26	3 17	10 19			Venus rises at 2 h. 0 min. morning
27	4 15	9 58			
28	5 13	9 37			Day is 13 hours 44 minutes long
29	6 11	9 15			Days are decreased 2 hours 51 minutes
30	7 9	8 54			Day breaks at 3 h. 1 min.
31	8 7	8 32			Clock and Sun are together

Lunations

	Jupiter sets	Venus rises
New Moon the 7th day, at 2 in afternoon	1 10 a 26	2 m 18
First Quarter the 14th day, at 9 in morning	7 10 6	2 36
Full Moon the 21st day at 2 in afternoon	13 9 47	2 56
Last Quarter the 29th day, at 6 in afternoon	19 9 27	3 15
	25 9 8	3 37

M	W	Holy-Day	D rises	Moon's	Moon's	Aspects and
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather
1	F	14 S. aft. Trin.	10 a 32	26 11 16	28 n 32	☿
2	M	London burnt	11 33	8 26	28 25	♂ ♂ ♀
3	T	1666.	morn	20 50	26 53	Warm with
4	W	Sun rises 5 20	0 45	3 33	23 57	hunder
5	T	Sun sets 6 37	2 6	16 36	19 45	♂ ☉ ♀
6	F		3 29	29 58	14 29	Rain or hail
7	S	Enurchus	D sets	13 38	8 23	Nat. B. V. M.
8	F	15 S. aft. Trin.	6 a 55	27 35	1 46	
9	M		7 6	11 45	5 f 2	☐ 2 ♀
10	F	Sun rises 5 32	7 19	26 11	39	D in Perigeo
11	W		7 36	10 22	17 41	☐ h ♀
12	T	Sun sets 6 25	8 0	24 3	22 44	△ 2 ♀
13	F		8 35	9 1	0 26 25	☐ ☉ 2
14	S	Holy Cross-d.	9 25	23 12	28 24	Cloudy close
15	F	16 S. aft. Trin.	10 33	7 16	28 32	△ h ♀
16	M		11 55	21 9	26 51	weather
17	T	Lambert	morn	4 52	23 36	☐ ☉ h
18	W	Ember Week	1 22	18 22	19 7	
19	T	Sun rises 5 49	2 47	1 39	13 46	Mild with re-
20	F		4 9	14 41	7 54	freshing rains.
21	S	St. Matthew	D rises	27 29	1 49	
22	F	17 S. aft. Trin.	K. cor.	10 3	4 n 14	Fr. Alfred born
23	M	Sun sets 5 57	6 31	22 24	10 1	
24	T		6 46	4 33	15 21	
25	W	Sun rises 6 1	7 1	16 35	20 2	☐ 2 ♂
26	T	St. Egyptian	7 22	28 27	23 52	D in Apogeo
27	F		7 53	10 11	18 41	* 2 ♀
28	S	Sun sets 5 52	8 33	22 9	28 20	
29	F	18 S. aft. Trin.	9 27	4 7	28 41	St. Mic. Prs. C.A.
30	M	St. Jerome	10 35	16 15	27 40	* h ♀ (bo.

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long	Decl.	Long.	Decl.
1	4 47	22 25	19 39	22 52	6 12	10 13	8 25	18 25
7	4 51	22 26	20 1	22 55	10 10	8 47	15 40	16 40
13	4 58	22 28	20 28	22 57	14 0	7 18	22 57	14 58
19	5 0	22 29	21 1	23 1	17 51	5 47	16 16	12 20
25	5 23	22 30	21 41	23 4	21 41	4 16	7 38	9 5

M	Sun's	Sun's	Observations					
D	Longit	Declin.						
F	9 12	5	8 n	10	Clock after the Sun	0 min.	19	sec.
2	10	3	7	49				
3	11	1	7	26	Saturn sets at 10 h.	45 min.	at night	
4	12	0	7	4	Jupiter sets at 10 h.	16 min.	at night	
5	12	58	6	42				
6	13	56	6	20	Seven Stars south at 4 h.	34 m.	morning	
7	14	55	5	56	Day is 13 hours 6 minutes long			
F	15	53	5	3	Days are decreased 3 hours 30 minutes			
9	16	51	5	12	Day breaks at 3 h.	28 min.		
10	17	50	4	49				
11	18	48	4	26	Mars rises at 4 h.	56 min.	morning	
12	19	47	4	3	Venus rises at 2 h.	53 min.	morning	
13	20	45	3	40	Jupiter sets at 9 h.	47 min.	at night	
14	21	44	3	17	Saturn sets at 10 h.	7 min.	at night	
F	22	42	2	54				
16	23	41	2	31	Clock after the Sun	5 min.	22 sec.	
17	24	40	2	7	Twilight ends at 8 h.	13 min.		
18	25	38	1	44	Sun is due East at 6 h.	6 min.		
19	26	37	1	21				
20	27	36	0	57	Seven Stars south at 3 h.	45 m.	morning	
21	28	34	0	34	Moon eclipsed, invisible			
F	29	33	0	11	Sun enters \sphericalangle 10 h.	59 min.	afternoon	
23	0 32	0	13					
24	1 31	0	36		Day and night each 12 hours long			
25	2 30	1	0					
26	3 20	1	23		Mars rises at 4 h.	56 min.	morning	
27	4 28	1	46		Venus rises at 3 h.	43 min.	morning	
28	5 27	2	10					
F	6 26	2	33		Day is 11 hours 40 minutes long			
30	7 25	2	57		Days are decreased 4 hours 57 minutes			

Lunations

M	Jupiter	Venus
D	sets	rises

New Moon the 7th day, at 1 in morning	1	8 a 49	3 m 56
First Quarter the 13th day, at 4 in afternoon	7	8 31	4 17
Full Moon the 21st day at 6 in morning	13	8 13	4 37
Last Quarter the 29th day, at 11 in morn.	19	7 54	4 56
	25	7 35	5 16

M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather
1	T	Remigius	11 a 50	28 39	25 n 17	☐ ♄ ♂
2	W		morn	11 ♄ 21	21 37	Variable weather
3	T	Sun rises 6 17	1 11	24 25	16 47	
4	F	Sun sets 5 40	2 35	7 m 53	11 2	for some days.
5	S		3 58	21 46	4 34	
6	F	19 S. aft. Trin.	5 23	6 1	2 f 17	Faith
7	M	Sun rises 6 25	D sets	20 34	9 10	
8	T		5 a 52	5 m 18	15 39	☐ ♀ ♄, D in Per.
9	W	St. Denys	6 13	20 7 21	16 16	Windy weather
10	T	Ox. & Ca. T. b.	6 44	4 ♄ 53	25 32	☐ ♄ ♀
11	F		7 27	19 29	28 4	
12	F	Sun sets 5 25	8 31	3 51	28 41	
13	F	20 S. aft. Trin.	9 52	17 56	27 24	Fr. K. Ed. Conf.
14	M		11 17	1 42	24 29	
15	T	Sun rises 6 40	morn	15 10	20 17	Cold rain, or
16	W		0 42	28 20	15 10	flect.
17	T	E. heldred	2 3	11 X 15	9 29	* ☉ ♄
18	F	St. Luke	3 20	23 56	3 32	
19	S		4 36	6 ♄ 25	2 n 29	♂ ♂ ♀, * ☉ ♄
20	F	21 S. aft. Trin.	5 49	18 43	8 19	
21	M		D rises	0 8 52	13 46	Dull heavy
22	T	Sun sets 5 5	5 a 11	12 54	18 39	weather.
23	W	Sun rises 6 55	5 34	24 50	22 45	
24	T		6 0	6 ♄ 42	25 54	D in Apogeo
25	F	K. G. III. ac.	6 36	18 32	27 55	Crispin
26	S		7 24	0 26	24 40	
27	F	22 S. aft. Trin.	8 23	12 21	28 4	Stormy with
28	M	St. Sim. & Jude	9 36	24 26	26 9	
29	T		10 53	6 ♄ 45	22 59	some downfal
30	W	Sun sets 4 51	morn	19 21	18 41	
31	T		0 12	2 m 20	13 25	

M	Saturn		Jupiter		Mars		Venus.	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	♏ 41	22	♏ 32	22	♏ 45	23	♏ 32	2 43
7	♏ 26	0	22 34	23 15	23 11	29 24	♏ 9	22 26
13	♏ 26	23	22 35	24 9	23 14	♏ 16	♏ 25	29 53
19	♏ 26	49	22 37	25 7	23 17	7 9	♏ 58	7 21
25	♏ 27	18	22 38	26 6	23 20	11 2	♏ 32	14 50

M	Sun's	Sun's	Observations
D	Longit.	Declin.	

1	♏ 24	3	1	20	Clock after the Sun 10 min. 27 sec.
2	9	23	3	43	
3	10	22	4	7	Saturn sets at 9 h. 1 min. at night
4	11	21	4	30	Jupiter sets 8 h. 40 min. at night
5	12	21	4	53	
F 13	20	5	16		Sun eclipsed, invisible
7	14	19	5	39	Seven Stars south at 2 h. 43 m. morning
8	15	19	6	2	
9	16	18	6	25	Day is 11 hours 2 minutes long
10	17	17	6	48	Days are decreased 5 hours 35 minutes
11	18	17	7	11	Day breaks at 4 h. 39 min.
12	19	16	7	33	
F 20	16	7	56		Mars rises at 4 h. 56 min. morning
14	21	15	8	18	Venus rises at 4 h. 40 min. morning
15	22	15	8	40	
16	23	15	9	3	Clock after the Sun 14 min. 24 sec.
17	24	14	9	25	Twilight ends at 7 h. 9 min.
18	25	14	9	47	Sun is due East at 5 h. 29 min.
19	26	14	10	8	Day is 10 hours 22 minutes long
F 27	13	10	30		
21	28	13	10	51	Seven Stars south at 1 h. 51 min. morning
22	29	13	11	13	♏ greatest Elong. from the Sun
23	0 m	13	11	34	Sun enters ♏ 6 h. 52 min. morning
24	1	13	11	55	
25	2	12	12	15	Saturn sets at 7 h. 45 min. evening
26	3	12	12	30	Jupiter sets at 7 h. 32 min. evening
F 4	12	12	56		Mars rises at 4 h. 56 min. morning
28	5	12	13	16	Venus rises at 5 h. 26 min. morning
29	6	13	13	36	
30	7	13	13	56	Days are decreased 6 hours 51 minutes
31	8	13	14	16	Twilight ends at 6 h. 45 min.

Lunations						M	Jupiter	Venus
						D	se's	se's
New Moon the 5th day, at 11 morning						1	7 ^a 13	5 ^m 37
First Quarter the 12th day, at 2 morning						7	6 54	5 57
Full Moon the 20th day, at 1 morning						13	6 35	6 10
Last Quarter the 22d day, at 3 morning						19	6 16	6 34
						25	5 56	6 52
M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and		
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather		
1	F	All Saints	1 m 34	15 ^m 44	7 n 18			
2	S	Pr. Edward b.	2 56	29 36	0 46	All Souls		
3	F	23 S. aft. Trin.	4 22	13 ^m 55	6 f 5	Pr. Sophia bo.		
4	M	Sun rises 7 18	5 52	28 38	12 49	Sharp mornings		
5	T	Powder Plot	D sets	13 m 40	18 56	* ♀, * ♀, *		
6	W	Ter. b.	4 a 42	28 52	23 55	♂ ♀ (D in Pe.		
7	T	D. Cumb. bo.	5 22	14 ^f 27	15			
8	F	Ps. Aug. So. b.	6 38	29 1	28 35	Windy with rain		
9	S	L. Ma. d. Lon.	7 35	13 ^m 42	27 51	or fleet		
10	F	24 S. aft. Trin.	9 27	59 25	18			
11	M	St. Martin	10 27	11 ^m 49	21 19			
12	T		11 52	25 14	16 20	♂ ☉ ♀		
13	W	Britius	morn	8 ^m 17	10 44			
14	T	Sun sets 4 25	1 10	20 59	4 50	Cold clear frosty		
15	F	Machutus	2 25	3 ^m 26	1 n 7	weather		
16	S		3 38	15 40	6 57			
17	F	25 S. aft. Trin.	4 57	27 45	12 26	Hugh		
18	M	Sun rises 7 40	6 3	9 8 44	17 26			
19	T		7 13	21 39	21 43			
20	W	Edm. K. & M.	D rises	3 ^m 32	25 6	D in Apogeo		
21	T		4 a 33	15 23	27 24			
22	F	Cecilia	5 17	27 16	28 28	Boisterous		
23	S	St. Clement	6 13	9 ^m 11	28 12	winds,		
24	F	26 S. aft. Trin.	7 20	21 10	26 38	* ♀ ♂		
25	M	D. Glouc. b.	8 33	3 ^m 17	23 49	with hail,		
26	T		9 52	15 34	19 53			
27	W	Sun sets 4 7	11 8	23 7	15 1	* ♀ ♂		
28	T	Mich. Tende	morn	10 ^m 58	9 23	or snow		
29	F		0 27	24 13	3 11			
30	S	St. Andrew	1 48	7 ^m 54	3 f 22			

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	27	55	22	39	27	23	15	35
7	28	28	22	40	28	33	19	30
13	29	4	22	41	29	45	23	25
19	29	41	22	42	17	0	23	25
25	29	20	22	43	2	17	23	25
					1	17	11	15
					23	43	17	55

M	Sun's	Sun's		
D	Longit.	Declin.	Observations	
1	9m	13	14	f 35
2	10	13	14	54
F 11	13	15	13	
4	12	14	15	32
5	13	14	15	50
6	14	14	16	8
7	15	15	16	26
8	16	15	16	43
9	17	15	17	0
F 18	16	17	17	
11	19	16	17	34
12	20	17	17	50
13	21	17	18	6
14	22	18	18	22
15	23	18	18	37
16	24	19	18	52
F 25	19	19	7	
18	26	20	19	22
19	27	21	19	36
20	28	21	19	49
21	29	22	20	2
22	0	23	20	15
23	1	23	20	28
F 2	2	24	20	40
25	3	25	20	52
26	4	26	21	3
27	5	27	21	14
28	6	27	21	23
29	7	28	21	35
30	8	29	21	45
Clock after the Sun 16 min. 14 sec.				
Saturn sets at 7 h. 13 min. evening				
Jupiter sets at 7 h. 5 min. evening				
Seven Stars south oh. 49 min. morning				
Day is 9 hours 12 minutes long				
Days are decreased 7 hours 23 minutes				
Day breaks at 5 h. 28 min				
Twilight ends at 6 h. 29 min.				
♂ transits ☉, ingr. 2h. 51m. egr. 4h. 15m.				
Mars rises at 4 h. 52 min. morning				
Venus rises at 6 h. 19 min. morning				
Clock after the Sun 14 min. 53 sec.				
Saturn sets at 6 h. 18 min. evening				
Jupiter sets at 6 h. 16 min. evening				
Seven Stars south 11 h. 43 min. afternoon				
Sun enters ♄ 3 h. 3 min. morning				
Mars rises at 4 h. 48 min. morning				
Venus rises at 6 h. 52 min. morning				
Day is 8 hours 14 minutes long				
Days are decreased 8 hours 21 minutes				
♂ greatest Elong. from Sun				

Lunations

M	Jupiter	Venus
D	fers	rises

New Moon the 4th day, at 9 at night

First Quarter the 11th day, at 4 afternoon

Full Moon the 19th day, at 8 evening

Last Quarter the 27th day, at 4 afternoon

1	5	30	7	...
7	5	16	7	2
13	4	5	7	30
19	4	36	7	51
25	4	15	7	58

M	W	Holy-Days	D rises	Moon's	Moon's	Aspects and	
D	D	☉ rises & sets	& sets	Longit.	Declin.	Weather	
1	F	Advent Sund.	3 m 12	22 2	3 9	59	
2	M		4 40	6 m 41	16	56	Cold and frosty
3	T	Sun rises 7 19	6 15	21 41	21	46	weather
4	W	Sun sets 4 0	D sets	6 4	58	25	D in Perigeo
5	T		3 a 52	22 20	28	9	☐ h 24
6	F	Nicholas	5 5	7 35	28	16	Stormy and
7	S		6 30	22 32	26	18	
8	F	2 S. in Advent	7 59	7 4	22	37	Concept. V. M.
9	M		9 26	21 6	17	44	very cold.
10	T	Sun rises 8 5	10 49	4 X 38	12	8	
11	W	Sun sets 3 55	morn.	17 42	6 10	8	☉ h 8
12	T		0 4	0 23	0	8	
13	F	Lucy	1 17	12 45	5 n 45		Cold and bleak
14	S		2 30	24 53	11 19		
15	F	3 S. in Advent	3 41	6 8	51 16	24	with hail or rain.
16	M	O. sap. C. T. e.	4 55	18 44	20 50		
17	T	Ox. T. ends	6 8	0 II 35	24 24		D in Apogeo
18	W	Ember Week	7 17	12 27	26 56		
19	T	Sun rises 8 8	D rises	24 20	28 16		Variable wea-
20	F	Sun sets 3 52	3 a 55	6 18	28 18		
21	S	St. Thomas	5 0	18 19	26 58		Shortest day
22	F	4 S. in Advent	6 13	0 Ω 27	24 23		
23	M	Sun rises 8 8	7 29	12 41	20 41		ther for many
24	T		8 45	25 5	16 1		
25	W	Christmas-day	10 1	7 41	10 37		☉ ☉ h
26	T	St. Stephen	11 17	20 32	4 41		days to the end
27	F	St. John	morn.	3 42	1 f 36		☉ h 8
28	S	H. Innocents	0 38	17 14	8 0		
29	F	1 S. aft. Christ.	2 0	1 m 9	14 12		of the year.
30	M	Sun sets 3 54	3 29	15 30	19 48		
31	T	Silvester	5 1	0 15	24 24		☉ ☉ 24

M	Saturn		Jupiter		Mars		Venus	
D	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	15° 0'	22 143	31° 34'	23 24	51° 14'	12 f 38	1 f 16	19 f 50
7	1 41	22 43	4 55	23 22	9 12	13 57	8 49	21 25
13	2 22	22 43	6 16	23 19	13 11	15 14	16 22	22 38
19	3 5	22 43	7 39	23 14	17 10	16 27	23 56	23 25
25	3 47	22 42	9 2	23 9	21 9	17 35	1 15	29 23 47

M	Sun's	Sun's
D	Longit.	Declin.

Observations

F	9 f 30	21 f 54	Clock after the Sun 10 min. 29 sec.
2	10 31	22 3	
3	11 32	22 12	Saturn sets a 5 h. 21 min. afternoon
4	12 33	22 20	Jupiter sets at 5 h. 26 min. afternoon
5	13 34	22 27	
6	14 35	22 35	Seven Stars south at 10 h. 39 m. afternoon
7	15 36	22 41	
F	16 37	22 48	Mars rises at 4 h. 39 min. morning
9	17 38	22 54	Venus rises at 7 h. 30 min. morning
10	18 39	22 59	
11	19 40	23 4	Day is 7 hours 50 minutes long
12	20 41	23 9	Days are decreased 8 hours 46 minutes
13	21 42	23 13	Day breaks at 6 o'clock
14	22 44	23 16	Twilight ends at 6 o'clock
F	23 45	23 19	Sun due East at 4 h. 40 min.
16	24 46	23 22	
17	25 47	23 24	Saturn sets at 4 h. 27 min. afternoon
18	26 48	23 26	Jupiter sets at 4 h. 40 min. afternoon
19	27 49	23 27	
20	28 50	23 28	Seven Stars south at 9 h. 37 m. afternoon
21	29 51	23 28	Sun enters 15 3 h. 23 min. afternoon
F	0 53	23 28	Shortest Day is 7 h. 44 minutes long
23	1 54	23 27	
24	2 55	23 26	Clock and Sun are together
25	3 56	23 25	
26	4 57	23 23	Mars rises at 4 h. 28 min. morning
27	5 58	23 20	Venus rises at 8 h. 0 min. morning
28	7 0	23 17	
F	8 1	23 14	Day is 7 hours 48 minutes long
30	9 2	23 10	Days are increased 4 minutes
31	10 3	23 5	Clock before the Sun. 3 min 30 sec.

A TABLE of the Equation of Time.

Days	January		Febr.		March		April		May		June						
	m	f	m	f	m	f	m	f	m	f	m	f					
1	4	subtr	15	14	subtr	7	12	subtr	37	3	52	3	add	10	2	add	38
2	4	subtr	43	14	subtr	14	12	subtr	24	3	33	3	add	17	2	add	29
3	5	subtr	10	14	subtr	20	12	subtr	11	3	15	3		24	2		19
4	5		38	14		25	11		58	2	57	3		30	2		9
5	6		5	14		30	11		44	2	39	3		36	1		59
6	6		31	14		34	11		30	2	22	3		41	1		48
7	6		57	14		37	11		15	2	4	3		46	1		37
8	7		22	14		39	11		0	1	47	3		50	1		26
9	7		47	14		40	10		44	1	30	3		53	1		14
10	8		12	14		41	10		28	1	14	3		56	1		3
11	8		35	14		41	10		12	0	57	3		58	0		51
12	8		59	14		40	9		56	0	41	3		59	0		38
13	9		21	14		38	9		39	0	26	4		0	0		26
14	9		43	14		36	9		22	0	10	4		0	0		13
15	10		4	14		33	9		5	0	act	5		4	0		1
16	10		25	14		29	8		47	0	add	20		3	59	0	12
17	10		45	14		24	8		30	0	34	3		58	0	subtr	25
18	11		4	14		19	8		12	0	48	3		56	0	subtr	38
19	11		22	14		13	7		54	1	2	3		54	0	subtr	51
20	11		40	14		6	7		35	1	15	3		51	1		4
21	11		57	13		59	7		17	1	28	3		48	1		17
22	12		13	13		50	6		59	1	40	3		44	1		30
23	12		28	13		42	6		40	1	52	3		39	1		42
24	12		42	13		32	6		21	2	4	3		35	1		55
25	12		56	13		28	6		3	2	14	3		29	2		8
26	13		8	13		12	5		44	2	25	3		23	2		20
27	13		20	13		1	5		25	2	35	3		17	2		33
28	13		31	12		49	5		6	2	44	3		10	2		45
29	13		41				4		48	2	54	3		3	2		57
30	13		51				4		29	3	2	2		55	3		9
31	13		59				4		10			2		46			

if the equal or clock time be given; add or subtract the tabular numbers to or from it, as directed in the table; the sum or difference will be the apparent or solar time.

In Minutes and Seconds for the Year 1782.

Days	July		August		Sept.		Octob.		Nov.		Dec.	
	m	f	m	f	m	f	m	f	m	f	m	f
1	3	subtr ^{act} 20	5	subtr ^{act} 52	0	add 19	10	add 27	16	add 14	10	add 29
2	3	32	5	48	0	add 38	10	add 46	16	add 15	10	add 6
3	3	43	5	44	0	57	11	4	16	14	9	42
4	3	54	5	39	1	17	11	22	16	13	9	17
5	4	4	5	33	1	36	11	40	16	11	8	52
6	4	15	5	27	1	56	11	57	16	8	8	26
7	4	24	5	20	2	16	12	14	16	4	8	0
8	4	34	5	13	2	36	12	30	15	59	7	33
9	4	43	5	5	2	56	12	46	15	54	7	6
10	4	52	4	56	3	17	13	2	15	48	6	39
11	5	0	4	47	3	37	13	17	15	41	6	11
12	5	8	4	38	3	58	13	31	15	33	5	42
13	5	16	4	27	4	19	13	45	15	24	5	14
14	5	23	4	17	4	40	13	59	15	15	4	45
15	5	29	4	5	5	1	14	12	15	4	4	16
16	5	35	3	53	5	22	14	24	14	53	3	47
17	5	40	3	41	5	43	14	36	14	41	3	17
18	5	45	3	28	6	4	14	48	14	28	2	47
19	5	49	3	15	6	25	14	58	14	14	2	18
20	5	53	3	1	6	46	15	9	14	0	1	48
21	5	56	2	46	7	7	15	16	13	45	1	18
22	5	59	2	31	7	28	15	27	13	29	0	48
23	6	1	2	16	7	48	15	35	13	12	0	18
24	6	2	2	0	8	9	15	42	12	54	obef.	12
25	6	3	1	44	8	29	15	49	12	36	0	42
26	6	3	1	27	8	50	15	55	12	16	1	12
27	6	3	1	10	9	10	16	0	11	56	1	42
28	6	2	0	53	9	30	16	5	11	36	2	11
29	6	0	0	36	9	49	16	8	11	14	2	41
30	5	58	0	18	10	8	16	11	10	52	3	10
31	5	55	0 aft	1			16	13			3	39

If the solar or apparent Time be given; add or subtract the tabular Numbers to or from it, contrary to the Directions of the Table; the Sum or Difference will be the Mean or Clock Time.

34 Mercury's Longitude and Declination for 1782

Days	Long.	Declin.	Long.	Declin.	Long.	Declin.
1	23 54	23 1 12	13 12	10 1 51	29 5	11 20
4	28 17	23 42	18 30	17 11	0 56	2 47
7	2 45	24 2	23 55	15 17	1 27	3 30
10	7 January	24 11	29 February	24 13	0 0	3 March
13	11 January	24 8	4 February	53 10	28 49	2 March
16	16 January	3 53	10 February	20 8	26 15	1 37
19	21 January	23 26	15 February	38 5	23 32	0
22	26 15	22 45	20 February	32 3	21 8	1 27
25	1 13	21 51	24 February	48 1	19 2	2 5
28	6 17	20 43	28 February	14 0	18 2	3 5
1	18 32	4 1 46	20 10	5 53	22 5	5 4
4	19 33	4 58	25 20	7 42	28 46	25 27
7	21 13	4 49	0 42	9 54	4 19	25 28
10	23 27	4 21	6 20	12 10	9 31	25 10
13	26 April	3 36	12 May	17 14	14 10	24 35
16	29 April	2 34	18 May	28 16	18 4	23 47
19	2 54	1 19	24 May	53 18	22 46	22 50
22	6 47	0 9	1 26	20 55	26 21	21 46
25	10 59	1 48	8 22	36	29 30	20 38
28	15 28	3 37	14 31	23 55	2 1	19 28
1	4 17	18 20	26 5	17 15	5 11	11 22
4	5 49	17 17	26 6	17 59	11 10	8 58
7	6 42	16 20	27 7	8 36	16 49	6 Sept.
10	6 54	15 36	29 10	9 1	22 19	4 Sept.
13	6 July	23 15	2 12	19 7	27 39	1 55
16	5 11	14 47	6 Aug.	18 53	2 50	0 25
19	3 25	14 47	10 49	18 15	7 52	2 4
22	1 20	15 5	16 5	17 11	11 45	4 5
25	29 13	15 35	21 44	15 43	17 30	7 7
28	27 26	16 14	27 33	13 57	22 5	9 11
1	26 35	11 11	29 3	22 31	19 18	15 25
4	0 56	13 4	28 31	21 56	22 54	16 39
7	5 8	14 50	26 36	20 47	26 51	17 55
10	9 October	12 16	23 November	19 19	1 19	1 19
13	13 October	6 17	19 November	19 17	5 20	20 20
16	16 47	19 19	15 44	15 10	9 46	21 20
19	20 12	20 29	13 30	13 54	14 15	22 20
22	23 16	21 26	12 59	13 24	18 47	23 1
25	25 52	22 8	14 1	13 38	22 28	23 5
28	27 51	22 33	16 15	14 22	28 12	24 2

ECLIPSES, &c.

THIS Year affords four Eclipses of the two great Luminaries, as follows: 1. The first is of the Moon, on the 29th of March, about our Eight o'Clock in the Morning; but invisible in these Parts. 2. The second is of the Sun on the 12th of April, and partly visible here: It begins at 6 h. 13 m. Afternoon; and the Sun sets at 6 h. 49 m. before the Eclipse is half over. 3. The third is of the Moon the 21st of September, from 1 h. 20 m. to 3 h. 28 m. in the Morning, which is long before the Moon rises here. 4. The fourth is a solar Defect on the 7th of October, about our One o'Clock in the Morning, and therefore invisible to all Europe.

There will also happen a small Transit of Mercury over the upper Limb of the Sun, from Left to Right, on the 12th of November, from 2 h. 51 m. to 4 h. 15 m. in the Afternoon. Mercury will pass over like a round black spot, but so small that some Sort of Telescope will be necessary for viewing it.

Eclipses of Jupiter's first Satellite.

January	February	March	April
Immersions	Immersions	Immersions	Immersions
2 7 57 21	1 9 49 24	1 17 23 34	2 14 1 52
4 2 24 54	3 4 17 28	3 11 52 14	4 8 30 44
5 20 52 27	4 22 45 35	5 6 20 56	6 2 59 35
7 15 20 3	6 17 13 47	7 0 49 37	7 21 28 26
9 9 47 38	8 11 42 2	8 19 18 21	9 15 57 18
11 4 15 15	10 6 10 16	10 13 47 5	11 10 26 8
12 22 42 54	12 0 38 34	12 8 15 51	13 4 54 56
14 17 10 35	13 19 6 56	14 2 44 38	14 23 23 42
16 11 38 17	15 13 35 16	15 21 13 26	16 17 52 30
18 6 6 2	17 8 3 40	17 15 42 15	18 12 21 17
20 0 33 50	19 2 32 6	19 10 11 3	20 6 50 2
21 19 1 39	20 21 0 36	21 4 39 56	22 1 18 46
23 13 29 31	22 15 29 7	22 23 8 44	23 19 47 30
25 7 57 27	24 9 57 41	24 17 37 28	25 14 16 12
27 2 25 23	26 4 26 17	26 12 6 25	27 8 44 54
28 20 53 20	27 22 54 56	28 6 35 19	29 3 13 34
30 15 21 25		30 1 4 8	30 21 42 11
		31 19 33 3	

May	June	July	August
Immersions	Immersions	Emersions	Emersions
2 16 10 45	1 18 14 10	1 22 26 1	1 0 33 8
4 10 39 19	3 12 42 26	3 16 54 26	2 19 2 8
6 5 7 53	5 7 10 44	5 11 22 51	4 13 31 10
7 23 36 27	7 1 38 59	7 5 51 17	6 8 0 12
9 18 4 59	8 20 7 15	9 0 19 46	8 2 29 16
11 12 33 30	10 14 35 30	10 18 48 16	9 20 58 22
13 7 2 1	12 9 3 44	12 13 16 48	11 15 27 30
15 1 30 30	14 3 31 57	14 7 45 23	13 9 56 40
16 19 58 37	Emersions	16 2 14 0	15 4 25 53
18 14 27 23	16 0 11 6	17 20 42 39	16 22 55 5
20 8 55 48	17 18 39 23	19 15 11 19	18 17 24 20
22 3 24 11	19 13 7 41	21 9 40 2	20 11 53 39
23 21 52 33	21 7 35 59	23 4 8 46	22 6 22 57
25 16 20 54	23 2 4 17	24 22 37 33	24 0 52 17
27 10 49 14	24 20 32 37	26 17 6 22	25 19 21 40
29 5 17 33	26 15 0 56	28 11 35 14	27 13 51 2
30 23 45 52	28 9 29 16	30 6 4 13	29 8 20 24
	30 3 57 37		31 2 49 48
September	October	November	December
Emersions	Emersions	Emersions	
1 21 19 19	1 23 40 29	1 1 56 15	The Eclipses of Jupiter's Satel- lites will not be visible this Month, Jupi- ter being too near the Sun.
3 15 48 46	3 18 9 53	2 20 25 3	
5 10 18 15	5 12 39 16	4 14 53 40	
7 4 47 44	7 7 8 38	6 9 22 30	
8 23 17 12	9 1 38 0	8 3 51 8	
10 17 46 41	10 20 7 17	9 22 19 43	
12 12 16 11	12 14 36 34	11 16 48 15	
14 6 45 43	14 9 5 49	13 11 16 45	
16 1 15 14	16 3 35 2	15 5 45 12	
17 19 44 43	17 22 4 11	17 0 13 36	
19 14 14 14	19 16 33 21	18 18 41 57	
21 8 43 43	21 11 2 27	20 13 10 15	
23 3 13 14	23 5 31 33	22 7 38 29	
24 21 42 43	25 0 0 33	24 2 6 41	
26 16 12 13	26 18 29 33	25 20 34 50	
28 10 41 40	28 12 58 28	27 15 2 56	
30 5 11 5	30 7 27 22	29 9 31 0	

THE Times of the Eclipses contained in the last Table are adapted to the Meridian of the Royal Observatory at *Greenwich*; and by carefully observing the Times of the Immersions and Emerfions of this Satellite, which is the most convenient and proper for Geographical Purpofes of any of the other three, the Longitude or Difference of the Meridian of the Place where the Observation is made, and the Place the Eclipses are calculated for, may be exactly discovered; and is the most correct and practical Method ever yet hit upon, notwithstanding the many whimsical, and some ingenious Ways, invented for that Purpose, by several Persons who have spent much Time and Labour, in Hopes of gaining the great Reward of Twenty Thousand Pounds offered by Parliament, for a practical Method of solving that grand Problem with Certainty, but hitherto to no Effect. It is also much more easy and correct to find the Difference of Meridians by this Method, than by the Eclipses of the Moon, not only on Account of their more frequent happening, but because the Motion and Times of these Immersions and Emerfions are more easily observed than the Times of the Beginning and End of a Lunar Eclipse; because the Time of the Moon's Ingress into the Shadow of the Earth, and her Egress out of it, is not easily distinguished from that of the Penumbra.

I shall illustrate the Use of the preceding Table by an Example.

Suppose on the 25th Day of *October* this Year, the Time of the Emerfion of *Jupiter's* first Satellite be observed (by a Telescope) in an unknown Meridian, to happen at 1 h. 24 min. 45 sec. at Night; I find by the Table, that the Time of this Emerfion will happen at the *British* Observatory at 0 h. 0 min. 33 sec. the same Day: The Difference of the Times is 1 h. 24 min. 12 sec. which being converted into Degrees and Minutes of the Equator, will make 21 deg. 3 min. the Longitude of the Place of Observation to the East; because the Time is more than that at the *British* Observatory.

Operation.	{	Emerfion observed	—	—	1 ^h 24 ^m 45 ^s
		Emerfion at <i>Greenwich</i>	—	—	0 0 33
					—
		The Difference of Time	—	—	1 24 12
		Answering to	—	—	21° 3' 0"

C 3

The

The Dominion of the Moon in Man's Body passing under the Twelve Zodiacal Constellations.

♈
Head & Face.

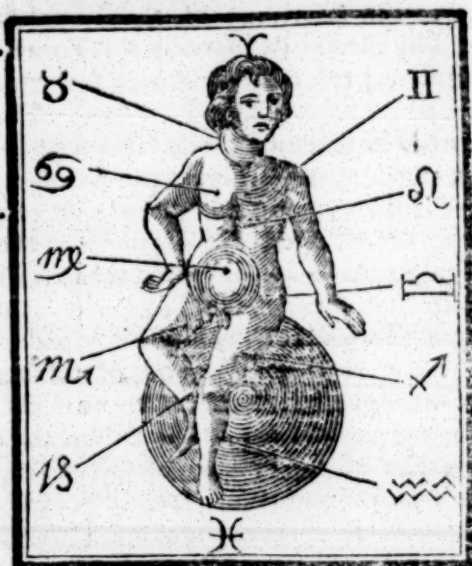
♉
Neck and
Throat.

♊
Breast, Stoma.
and Ribs.

♋
Bowels and
Belly.

♌
Secret
Members.

♍
Knees.



♎
Arms and
Shoulders.

♏
Heart and
Back.

♐
Reins and
Loins.

♑
Thighs.

♒
Legs.
The Feet.

The Characters of the Seven Planets.

♄ Saturn, ♃ Jupiter, ♂ Mars, ☉ Sol, ♀ Venus, ☿ Mercury,
☾ Luna, ☊ Dragon's Head, ☋ Dragon's Tail.

Manlius upon the Twelve Signs paraphrased.

- ♈ The princely Ram glittering in golden Wool,
♉ Wonders to see the backward rising Bull,
♊ With Looks submissive beckons the Twins; next whom
♋ ♎ Cancer, who after him sees Leo come;
♌ Him Virgo follows, then the Scales that weigh
♍ In even Balance equal Night and Day,
♎ Draw on the Scorpion with the fiery Sting,
♏ { At which the Centaur with his Shaft levelling,
♐ { Seems ready to let fly: To these comes on
♑ The Goat's contracted Constellation.
♒ Aquarius next pours from his Urn a Flood,
♓ Whilst the glad Fish to the lov'd Waters scud.

These Characters are no enchanting Tools,
For crafty Knaves to bubble credulous Fools:
But wise Men's Marks, that briefly represent
The several useful Objects thereby meant:

Who knows them well, and can them right apply,
Has the true Ground-work of Astrology.

A Compendious Chronology of memorable Things
since the Creation to this present Year.

A.P.J.	<i>before Christ.</i>		<i>Years since.</i>
710	4004	The Creation of the World	5786
1766	2948	Noah born	4730
2366	2348	Noah's Flood began	4130
2481	2233	The Babylonian Monarchy established	4015
2718	1996	Abraham born	3778
2986	1728	Joseph sold into Egypt	3510
3143	1571	Moses born	3353
3223	1491	The Israelites Departure out of Egypt	3273
3530	1184	Troy taken and destroyed by the Greeks	2966
3710	1004	Solomon's Temple built and dedicated	2785
4126	588	Jerusalem and the Temple destroyed	2370
4176	538	Daniel delivered from the Den of Lions	2320
4198	516	The Temple of Jerusalem rebuilt	2298
4391	323	The Death of Alexander the Great	2105
4710	4	The true Year of Christ's Birth	1786
4714	0	The vulgar Year of Christ's Birth	1782

A. D

33	The Passion and Resurrection of Jesus Christ	1749
70	Jerusalem and the Temple destroyed by Titus	1712
100	St. John, the last of the Apostles, dies Dec. 20.	1682
313	Christianity triumphs under Constantine	1469
476	Augustulus, the last Roman Emperor, deposed	1306
606	The wicked Phocas makes Pope Boniface Head of the Church	1176
608	Mahomet broaches his Imposture at Mecca	1174
872	Italy and Rome plundered by the Saracens	910
1012	Swein King of Denmark conquers England	770
1066	William Duke of Normandy conquers England	716
1110	Arts and Sciences taught in Cambridge	672
1119	The first War between the French and English	563
1300	The Mariners Compass invented	482
1330	The Comaries discovered by an English Ship	452
1380	Gunpowder and the Use of Guns first found out	402
1453	Constantinople taken from the Christians	329

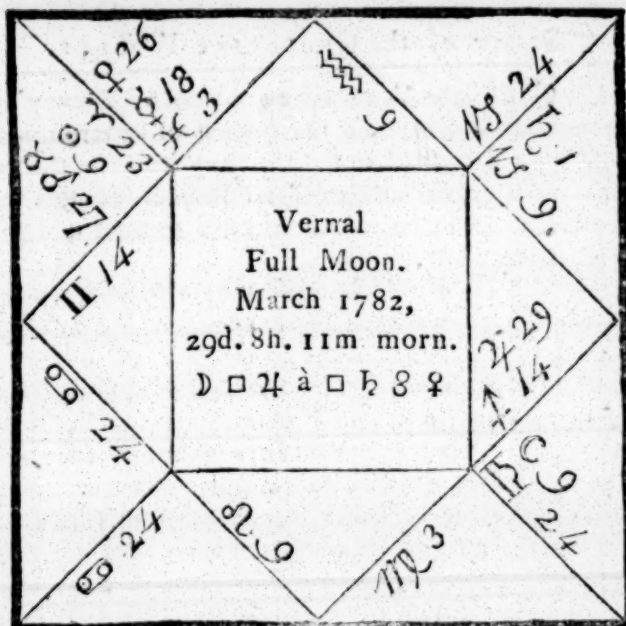
1463	The <i>Persians</i> conquered by <i>Tamerlane</i>	319
1500	<i>Rome</i> plundered by the Duke of <i>Bourbon</i>	282
1517	<i>Martin Luther</i> first disputed against Popery	264
1536	<i>England</i> separated from the Church of <i>Rome</i>	246
1588	The <i>Spanish Armada</i> defeated by the <i>English</i>	192
1603	<i>Q. Eliz.</i> dies <i>March 24.</i> and <i>K. James I.</i> began	179
1604	Died of the Plague in <i>London</i> , in 2 Years, 68,596	178
1605	Gunpowder Treason, <i>Nov. 5.</i>	177
1613	The New River Water brought to <i>London</i>	169
1618	The excellent Sir <i>Walter Raleigh</i> beheaded	164
1625	<i>K. James I.</i> died, <i>King Charles I.</i> began, <i>Mar. 27.</i>	157
1625	35,417 Persons died of the Plague in <i>London</i>	157
1641	The cruel <i>Irish</i> Massacre began, <i>October 23.</i>	141
1643	<i>Burleigh-House</i> stormed by <i>Cromwel</i> , <i>July 24.</i>	139
1649	<i>K. Charles I.</i> beheaded, <i>January 30.</i>	133
1658	<i>Oliver Cromwell</i> died.	124
1660	<i>K. Charles II.</i> restored, <i>May 29.</i>	122
1665	68,586 Persons died of the Plague in <i>London</i>	117
1666	<i>London</i> burnt, and a great Sea-Fight with the <i>Dutch</i>	116
1672	War declared against the <i>Dutch</i> , <i>March 17.</i>	110
1674	A great Snow for 11 Days together	108
1675	The Town of <i>Northampton</i> burnt, <i>Sept. 3.</i>	107
1680	A great and splendid Comet appeared	102
1684	The great Frost that held 13 Weeks	98
1685	<i>K. Charles II.</i> died, <i>Feb. 6.</i> and <i>K. James II.</i> began	97
1685	The Duke of <i>Monmouth</i> beheaded, <i>July 15.</i>	97
1688	Seven Bishops sent to the Tower, <i>June 8.</i>	94
1688	<i>K. James II.</i> abdicated, <i>December 12.</i>	94
1689	<i>K. William</i> and <i>Q. Mary</i> crowned, <i>April 11.</i>	93
1692	The <i>French Fleet</i> entirely defeated by the <i>English</i>	90
1698	<i>Whitehall Palace</i> destroyed by Fire.	84
1702	<i>K. William</i> died, <i>March 8.</i> and <i>Q. Anne</i> began	80
1702	<i>Q. Anne</i> proclaimed War against <i>France</i> , <i>May 4.</i>	80
1703	A great and terrible Wind, <i>Nov. 26</i> and <i>27.</i>	79
1704	<i>Gibraltar</i> taken by the <i>English</i>	78
1707	<i>England</i> and <i>Scotland</i> united, <i>May 1.</i>	75
1710	Riots and great Disturbances in <i>England.</i>	72
1714	<i>Q. Anne</i> died <i>August 1.</i> and <i>K. George I.</i> began	68

A.D.		Years since.
1715	A Rebellion in <i>Scotland</i> and <i>Lancashire</i> suppressed	67
1716	A great Frost in the Beginning of this Year	66
1718	The <i>Spanish</i> Fleet destroyed by Admiral <i>Byng</i> .	64
1719	A surprizing Meteor seen, <i>March</i> 19, at 8 at Night	63
1719	Mr. <i>Flamsteed</i> , a celebrated Astronomer died <i>Dec.</i> 31.	63
1727	The incomparable Sir <i>Isaac Newton</i> , died <i>Mar</i> 20.	55
1727	K. <i>George</i> I. died, <i>June</i> 11, and K. <i>George</i> II. began	55
1736	The Prince and Princess of <i>Wales</i> married, <i>Ap.</i> 27.	46
1739	Letters of Marque published in <i>London</i> against the <i>Spaniards</i> , <i>July</i> 16.	43
1739	War declared by <i>Great Britain</i> against <i>Spain</i> .	43
1739	<i>Porto-Bello</i> taken and destroyed by Admiral <i>Vernon</i> .	43
1740	A very severe Frost from <i>Dec.</i> 25, to <i>Feb.</i> 27.	42
1742	A Comet appeared from <i>Feb.</i> 18, to <i>March</i> 14.	40
1743	A splendid Comet appeared from <i>December</i> 23, to <i>February</i> 18, in ♀	39
1744	<i>March</i> 4, <i>France</i> declared War against <i>England</i> : and <i>March</i> 31, <i>England</i> declared War against <i>France</i> .	38
1745	<i>Cape Breton</i> taken from the <i>French</i> , <i>June</i> 16.	37
1746	The <i>Scotch</i> Rebels defeated by the Duke of <i>Cum-</i> <i>berland</i> , at <i>Culloden</i> , near <i>Inverness</i> , <i>April</i> 16.	36
1748	A General Peace signed <i>October</i> 7.	34
1749	<i>Cape Breton</i> restored to the <i>French</i> .	33
1750	The <i>British</i> Fishery established.	32
1751	The Prince of <i>Wales</i> died <i>March</i> 20.	31
1752	The Date and Calendar altered.	30
1755	<i>Lisbon</i> destroyed by an Earthquake, <i>Nov.</i> 1.	27
1756	<i>England</i> declared War against <i>France</i> , <i>May</i> 18.	26
1756	The Island <i>Minorca</i> taken by the <i>French</i> , <i>June</i> 27.	26
1757	Count <i>Brown</i> defeated by the King of <i>Prussia</i> near <i>Prague</i> , <i>May</i> 6.	25
1757	The King of <i>Prussia</i> defeated by Count <i>Daun</i> at <i>Collin</i> , <i>June</i> 18.	25
1758	The <i>French</i> defeat. at <i>Crowell</i> by P. <i>Ferdinand</i> , <i>June</i> 23	24
1758	Lord <i>Howe</i> slain, <i>July</i> 6, and Gen. <i>Abercrombie</i> repulsed at <i>Ticonderoga</i> , <i>July</i> 8.	24
1758	<i>Cape Breton</i> taken by the <i>English</i> , <i>July</i> 26.	24

A.D.

Years
since.

1758	The <i>Russians</i> defeated at <i>Zorndorff</i> by the King of <i>Prussia</i> , Sept. 25.	24
1759	The Island of <i>Guadalupe</i> taken by Gen. <i>Barrington</i> and <i>Commodore Moore</i> , May 1.	23
1759	The <i>French</i> defeat. at <i>Minden</i> by <i>P. Ferdinand</i> , Aug. 1.	23
1759	The King of <i>Prussia</i> defeated at <i>Cunnersdorff</i> by the Count <i>de Soltikoff</i> , August 12.	23
1759	Gen <i>Wolfe</i> slain, though victorious, Sept. 13, and <i>Quebec</i> taken Sept. 18, by Gen. <i>Townshend</i> .	23
1760	<i>Montreal</i> taken by Gen. <i>Amherst</i> , Sept. 8.	22
1760	K. <i>Geo. II.</i> died Oct. 25, and <i>Geo. III.</i> succeeded.	22
1761	<i>Pondicberry</i> taken by Col. <i>Coote</i> , Jan. 15.	21
1761	K. <i>George III.</i> married Q. <i>Charlotte</i> , Sept. 8.	21
1761	K. <i>George III.</i> crowned, Sept. 22.	21
1762	The Island of <i>Martinico</i> taken by Gen. <i>Monckton</i> and Adm. <i>Rodney</i> , Feb. 14.	20
1762	<i>George Prince of Wales</i> born, August 12.	20
1762	The <i>Havannah</i> taken by Lord <i>Albemarle</i> and Sir <i>George Pocock</i> , August 12.	20
1763	A general Peace in all <i>Europe</i> .	19
1763	Pr. <i>Frederick</i> , Bishop of <i>Osnaburgh</i> , born Aug. 16.	19
1765	Prince <i>William-Henry</i> born August 21.	17
1766	Princess <i>Charlotte-Augusta-Matilda</i> born Sept. 29.	16
1767	Prince <i>Edward</i> born Nov. 2.	15
1768	Princess <i>Augusta-Sophia</i> born Nov. 8.	14
1770	Princess <i>Elizabeth</i> born May 22.	12
1771	Prince <i>Ernest-Augustus</i> born June 5.	11
1772	<i>Swedes</i> resign their Liberties to the King.	10
1773	Prince <i>Augustus-Frederick</i> born Jan. 27.	9
1773	The Light Gold recoined.	9
1774	Prince <i>Adolphus-Frederick</i> born Feb. 24.	8
1775	War commenced against the <i>North-Americans</i> .	7
1776	Princess <i>Mary</i> born April 25.	6
1776	The <i>Americans</i> declare themselves independent.	6
1777	Princess <i>Sophia</i> born Nov. 3.	5
1778	The <i>French</i> sign a Treaty with the <i>Americans</i> .	4
1778	War begun against the <i>French</i> .	4
1779	Prince <i>Octavius</i> born Feb. 23.	3
1779	War commenced against the <i>Spaniards</i> .	3
1780	War against the <i>Dutch</i> begun.	2



At this Vernal Lunation we have 9° of ♊ culminating, and 14° of ♋ on the Ascendant, and all the Planets under the Earth, except the ☽ in the 6th House, ♀ and ☿ in the 11th, the ☉ and ♂ in the 12th.

Venus just separated from a ☽ of ♃, is now in * with ♂, and applying to a ☽ of ♄.—Were I to enumerate all the Minutiae of this Scheme, it would exhibit a View as multifarious as the famed Pandora's Box. But I shall confine myself to the Outlines of the Picture only, and leave it to young Tyros to investigate the more minute Parts.—Many and great will be the Transactions in divers Parts of the World; and it looks as if War was about to break out in a new Part of the World. The Places chiefly concerned, are Russia, Polonia, France, Italy, Ireland, Algiers, Paris, Rome, Lisbon, &c.—Things seem to wear a promising Aspect, particularly to the Merchants and Traders of this Kingdom; and a good Spring. But I shall wave any farther Judgment on this Head, and advert to that of the Comet that appeared in the Spring last Year, in or near the Sign Taurus, and give you the Opinion of Galvifius and Helvicus, two of the first Writers on Comets; who say, when a Comet appears in the Sign Taurus, it is 'significat malum esse hominum, et paucitatem bonum eorum, &c.' It denotes Evils to Mankind, Death of some potent Person, Mortality to Horses, Oxen, Cows, &c. Very hard Weather, dark, cloudy, with much Snow and Wind, Storms and Shipwrecks, 'cum multis aliis.' Which we ought to beseech God to avert, and let those Things which are the Fore-runners of his Justice, be as Warnings to us; and that we may not persist in our corrupt and evil Courses, but return from them, and thereby obtain his Favour and Blessings.

A Survey of the CELESTIAL WORLDS.

HAVING of late Years taken a general Survey of this terraqueous World, and the Effects of its circum-incumbent Atmosphere, we shall extend our Views to the celestial Worlds, the more proper and essential Subject of this our annual Ephemeris: And first, of those most remote and glorious Spangles, the fixed Stars.

They are said to be fixed, because they always keep (at least seemingly) the same invariable Distance from one another, and from the Ecliptic, as if they were so many Studs of Gold fixed in the crystal Firmament, as Empedocles and Anaximenes, (according to the Testimony of Plutarch de Placit. Philosoph. l. 2. c. 13.) held. Hence the Sphere wherein they are conceived to be ranged, is called *ἀπλανής*, i. e. inerrans, in Regard of the unalterable Order observed in their Intervals or Interstitia: And for their Intervals or Interstitia. And for this Reason chiefly, Ricciolus conceives the Multitude of the fixed Stars (as it were an Army drawn up in Battle Array) might be called the Militia of Heaven.

The Particulars to which we shall confine our Enquiries, touching these glorious and splendid Bodies, shall be these following:

First, Their Substance.

Secondly, Their light Colour, and Scintillation:

Thirdly, Their Number.

Fourthly, Their Figure.

Fifthly, Their Magnitude.

Sixthly, Their Place and Distance from the Earth, or rather Sun.

As to their Substance, the Opinion of the Ancients are various. Zoroaster maintained the Stars to be of a fiery Nature; Thales held them to be earthly, yet withal fiery; Empedocles maintained to be fiery, and to consist of that Fire which the Æther containing in itself, struck forth in its Secretion; Anaxagoras affirmed (but very extravagantly) that the ambient Æther being of a fiery Nature, by the Swiftness of its Motion snatcheth up Stones from the Earth, which being set on fire, be-

come

come Stars, and are carried from East to West. Diogenes conceived them to be of the Substance of Pumice-stones set on fire, and to be the Spiracula, or breathing Holes of the World. Plato, with more Reason, held them to be for the most Part of a fiery Nature; yet to admit of the Mixture of other Elements, as it were Cement, to knit and consolidate them. Xenophanes supposes them to be Clouds, set on fire in the Manner of Coals, quenched in the Day-time, and in the Night re-kindled. Heraclides and the Pythagoreans held every Star to be a World by itself, existing in the infinite etherial Space; and containing an Earth, and Air, and a Sky; which Opinion is found in the Works of Orpheus, for his Followers affirmed the Stars to be so many Worlds. Aristotle and his Followers maintain them to be of the same Substance as the Heavens, and only more condensed; and to be simple Bodies without the Mixture of any Elements. The Stoics, and with them our Manlius, make them to be of a fiery Substance. Others conceive them to be composed of the same Matter as Exhalations and Vapours, and consequently to consist of a Substance partly aqueous, partly aerial; of which see Pliny, l. 2. c. 9. Petrus Comestor, Hugo Victorinus, and Eugubinus.

Of all these, the most celebrated and the most probable Opinion is, that the Stars are fiery Bodies. An Opinion which wants not the Authority of the ancient Christian Church to back it, which in (Hymn feria secunda ad Vesper, of which St. Ambrose is held to be the Composer) sings after this Manner,

“ Aquæ fluente dividens
 “ Cælum dedisti limitem,
 “ Firmans locum cælestibus,
 “ Simulquæ Terræ Rivulis,
 “ Ut unda flammæ temperet.
 “ Terræ solum nec dissipet,” &c.

Where we find the Reason why the Waters are placed above the Heavens, viz. to restrain and temper the excessive Fervor of the Sun and Stars. Again, in Hymn fer. quarta ad Vesper, the same Church thus sings,

“ Cæli Deus sanctissime,
 “ Qui Lucidum centrum poli,
 “ Candore pingis igneo.”

Of the same Sentiment are most of the Fathers, not only of Latin, but the Greek Church; as Cyrillus, Hierosolimitanus and Cæsarius,

Cæsarius, who speaking of the Firmament, says, 'Recepturum
 ' erat subjeetorum luminarium splendorem solem inquam (&
 ' Lunam) &c. reliquum Astrorum cœlum, ex Igne Naturam
 ' habentem.' Theodoretus likewise, to the same Purpose:
 ' Bisariam Deus omnium divisit Aquarum Naturam, &c. quas
 ' dam fargum collocavit, quæ suo liquore, ac frigiditate non
 ' sinerent corrumpi Firmamentum ab Igne Luminarium.' St.
 Chrysostom is positive for the fiery Nature of the Stars; with
 whom concur Gregory Niger Procopius, and Anastasius Linaita
 conform to whose Opinions, is that of Tertullien, St. Ambrose,
 St. Augustin, Arnobius, Lactantius, Anselmus, Alcuinus, Beda.
 Conclude we therefore, induced as well by the Authority of
 these ancient Fathers, as persuaded by the concordant Senti-
 ments of divers eminent modern Philosophers, and Astronomers,
 that the Stars are compound and not simple Bodies, made up
 of elementary Matter, formed into fiery Globes, and consisting
 ex solido, &c. Liquids, as this terraqueous Globe of ours, and
 consequently subject to Corruption and Alteration. See Fran-
 ciscus Patricius, l. 15. Pancosinias, Ricciolus Almagest Nov.
 l. 9, sect 1. Scheinerus in Rosa Ursina, l. 4, 2. c. 22, 23, &c.
 24. Kircherus in Itinerar. Extatic. &c. Schottus upon him,
 from whom the more curious Reader may receive further Sa-
 tisfaction in this Enquiry touching the ingenious Nature and
 Substance of

Those tremulous Tapers of the Skies,
 Which burn at the Day's Obsequies.
 Resplendent Sparks of the first Fire!
 In which the Beauty we admire,
 And Light of those eternal Rays,
 The uncreated Mind displays;
 Visible Prints, by which we trace
 Time in its invisible Race!
 Pure bright Ideas that direct
 To the first Cause our Intellect.
 Jewels that deck with their rich Light
 The sable Garment of the Night.
 Mirrors, in whose clear polished Faces,
 Nature sees her's; th' World's Looking glasses.

To express in some of those poetical Characters, which the ingenious
 Marino hath given of them.

The next Thing which we are to take Notice of is their Light. As to
 their Light; that which is chiefly to be considered, is whether it be in-
 nate, given them by God at their Creation, or mutuatitious, borrowed from
 the

the Sun? The latter is maintained by Metrodorus, in Plutarch de Placit. Philosoph. l. 2. c. 17. With whom concur Albategnius and Vitellio, and divers others, both Philosophers and Astronomers, at this Day. But the first Opinion seems to carry more of Truth in it, and is by Macrobius asserted in Somn. Scrip. l. 1. c. 17. where he affirms, 'Omnes Stellae' (i. e. fixae) Lumine lucere suo, quod ille supra Solem locate in ipso purissimo Æthere sunt; in quo omne quicquid est Lux Naturalis, &c. sua est.' And this seems consequent to what hath already been declared touching their igneous Nature, for Fire cannot be without Light; and indeed it appears altogether improbable that the Sun should illuminate the fixed Stars, seeing as Bulialdus (in Astronom. Philolalic. l. 1. c. 11.) observes, the Sun's Diameter if beheld from Saturn would not appear greater than 3' 24"; and therefore must needs afford too weak and extenuated a Light sufficiently to illustrate even that Planet, much less is it able to give Light to the fixed Stars, removed to so great a Distance beyond Saturn. Wherefore, with Aristarchus Samius de Systemata Mundi, (if at least that Piece revived by Roberval, and published by Mersennus in Observat. Physico-Mathematica. be genuine.) We may reasonably imagine each of the fixed Stars to be the Head and chief Part of a distinct mundane System; as the Sun is the Head and chief Part of our visible System, and as the Sun hath several Planets constituted and carried about him; so likewise every one of the fixed Stars hath other mundane Bodies, like Planets disposed and moving about them, though not to be discerned by us, by Reason of their great Distance from our earthly Habitation. And accordingly Galilaeo (Dialog. 3. System Cosmiae) doubts not to assert, that the fixed Stars are so many Suns, conform and like this Sun of ours, serving to illuminate the innumerable other planetary and lunar Bodies within their respective Systems, and therefore endued with innate and original Light. Of the same Opinion is Antonius Maria de Beitha (in suo Radio Sydereomystico, p. 177.) with whom Ricciolus (Almagest. Nov. l. 6. c. 2.) concurs; where he says, 'Mihi longe probabilior horum Opinio videtur, (Bruni, Galilaei, Renati Des Cartes, & Reithaei) quia magis congruit opificis Numinis Majestati, ut non unicam Stellarum à se ipsa Lucentem sed plures instar Solis accenderit; nec alium sui Luminis fontem agnoscerent quam omnium Luminum Fratrem Deum.' See to this Effect more fully, Gassendus Syntag. Nat. Physic. Part 2. l. 4. c. 4. Kircherus Itinerar. Extatica, Dialog. 1. c. 9. Hevelus in Cometograph. l. 7. and Otto de Guerick l. 7. De vacuo Spatio; where he treats de Stellis fixis.

As to their Colour, it is visibly various, according to the Difference of their Light, attuned by the divers Constitution of their Matter or Substance; some appearing of a ruddy, others of a Gold Colour; some of a Silver white, some pallid, others of a Leadene Hue: Whence some have made an Estimate of their Nature, and ranged them under the several Planets; of whose Qualities they conceived them to be participant, according to the Proportion they carry of Resemblance in their Colours; as for Example, of the Nature of β , they reckon Perseus, and that in the Belly of the Southern Fish, and in the Belly and Tail of Cetus; of the Nature partly of β , and partly of γ ; they reckon that in the right Shoulder of Cepheus, and in his left Foot, and those in the Girdle of Orion.

Orion. Of the Nature of ♀ and ♂; the first Star in Arles, that in the Beak of the Crow, and in the Head of Ophinchus; of ♀ and ♀ the Pole Star, those in the Head of the Dragon and Medusa, those in the Breast of Cassiopea and Hydra, in the Side of Perseus and in the Wing of Virgo, called Præindemiatrix, and in the Back and Tail of Leo; of ♀ and ♀, those in the left Shoulder of Bootes, in the Belly of the Hare, and in the Northern Scale of Libra; of the Nature of ♀, they count those in the Nodus et Commissura Piscium; of the Nature partly of ♀, partly of ♂, Arcturus, the Eagle and the Thigh of Pegasus, Regulus, or Cor Leonis, Sirius, and Cor Scorpis; of the Nature of ♀ and ♀, that in the Head of Andromeda, in the Thigh of Aquarius, and Achar Nahr 'five' 'ultima flumini Orionis;' of the Nature of ♀ and ♀, that in the Mouth and Shoulder of Pegasus, and the Southern Scale of Libra; of the Nature of ♂ the three in the Tail, and the four in the Side of the greater Bear, Aldebaran, the Hyades, and Pollux (one of the Twins); of ♂ and the ☉, the Aselli, and the Oculus Sagittarii; of the Nature of ♂ and ♀, Spica Virginis. Of the Nature of ♂ and ♀, the Head of Hercules, the Goat with the Kid, and those in either Shoulder of Orion; of ♂ and ♀, the Pleiades, and those in præsepe or manger. Of ♀, that in the Navel of Andromeda. Of ♀ and ♀, that in the Shoulder-blade of Andromeda; those in the Lyra, in Corona Gussis, in the Beak and Tail of the Swan, the Cup, and Fomalhaut. Of the Nature of ♀, Procyon or the lesser Dog, as by Schikardus (in Astroscopio) we find them ranged and distinguished.

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